











# **RESEARCH FAIRNESS INITIATIVE REPORT**



# 2018

INSTITUTO DE HIGIENE E MEDICINA TROPICAL (IHMT/NOVA)



#### Instituto de Higiene e Medicina Tropical Research Fairness Initiative Report 2018

This RFI report was produced according to the RFI guidelines that are current on the date of this publication. The RFI Guides and the criteria for validation of RFI Reports can be found on the RFI website (rfi.cohred.org). The publication of this report reflects the reporting organization's commitment to provide a fair and equitable research environment.

The report has been validated by the RFI Team as compliant with current reporting criteria. The content of the report is the sole responsibility of the reporting organization. The Council on Health Research for Development does not endorse, nor take responsibility for, the specific content of the report.

COHRED / RFI Team Geneva, 1 February 2018

Person Responsible for submission : António Carvalho, postdoctoral researcher, amcarvalho@ihmt.unl.pt

#### Name of Chair of RFI Report writing team

[Professor Paulo Ferrinho, Director, IHMT/NOVA]

#### Names of all members of RFI Report writing team

António Carvalho, Zulmira Hartz and Paulo Ferrinho

#### How to cite this report:

Carvalho, António; Hartz, Zulmira; Ferrinho, Paulo (2018), Instituto de Higiene e Medicina Tropical Research Fairness Initiative Report 2018.

# **Table of Contents**

Glossary	5
Foreword	7
Executive Summary	8
Motivation for becoming an RFI reporting institution	10
DOMAIN 1: FAIRNESS OF OPPORTUNITY	12
Topic 1. Relevance to the communities – in which the research is done	12
1.1.1. Research Priorities in Communities where Research is Conducted	12
1.1.2. Actions if there are No Research Priorities	14
1.1.3. Justification to Research Low Priority Topics	15
Topic 2. Early engagement of partners	16
1.2.1. Relationship between the 'Main/Lead/Sponsoring' and 'Other' Partners	16
1.2.2. SOPs for Partner Inclusion in Study Design	18
1.2.3. SOPs for Supportive Actions to Partners	20
Topic 3. Making Contributions of All Partners Explicit – Fair Research Contracting	22
1.3.1. Role Clarification in Research Partnerships	22
1.3.2. SOPs for Conflict Resolution	25
1.3.3. Making Potential Impact Explicit Before Starting Research	26
Topic 4. Ensuring That Matching and Other Co-Financing Mechanisms Do Not Underm Opportunities For Fair Participation of All Partners	
1.4.1. Equal Co-financing	28
1.4.2. Alternatives to Equal Co-financing	30
1.4.3. Research Outside National Priorities and Co-financing	31
Topic 5. Recognition of Unequal Research Management Capacities Between Partners an Providing For Appropriate Corrective Measures	
1.5.1. Research Management Capacity	33
1.5.2. Financial Management Capacity	36
1.5.3. Contracting and Contract Negotiation Capacity	38
Other Information Related to Increasing "Fairness of Opportunity"	39
Summary table for Domain 1 : Fairness of Opportunity	44
DOMAIN 2: FAIR PROCESS	47
Topic 6. Minimizing Negative Impact of Research Programmes on Health and Other Systems	47
2.6.1. Assessing Potential Harm of Research	47

2.6.2. Reducing the Negative Impact of Research	49
2.6.3. Compensation for Unintended (negative) Consequences of Research	50
Topic 7. Fair Local Hiring, Training and Sourcing	51
2.7.1. Local Staffing	51
2.7.2. Local Sourcing of Consumables and Services	52
2.7.3. Support for Local Capacity Development	53
Topic 8: Respect for the authority of local ethics review systems	54
2.8.1. Research Ethics Approval	54
2.8.2. Supporting Local Research Ethics Review Capacity	56
2.8.3. Enabling Access to Global Expertise	58
Topic 9. Data Ownership, Storage, Access and Use	60
2.9.1. Data Ownership Agreements	60
2.9.2. Material Transfer Agreements	62
2.9.3. Rights of Use of Data for Publication	
Topic 10. Encourage full cost recovery budgeting and compensation for all partners.	65
2.10.1. Full Cost Recovery Budgeting	65
2.10.2. Improving / Standardizing Budgeting	66
2.10.3. External Financial Audit	68
Other aspects of "Fair Process"	69
Summary table for Domain 2 : Fair Process	
DOMAIN 3: FAIR SHARING OF BENEFITS, COSTS AND OUTCOMES	
Topic 11. Research system capacities	
3.11.1. Training	
3.11.2. Research Management	
3.11.3. Increase (predictable) Funding	
Topic 12. Intellectual Property Rights and Tech Transfer	81
3.12.1. Technology Transfer	81
3.12.2. Sharing Intellectual Property Rights (IPR)	82
3.12.3. Contracting Support for IPR	84
Topic 13. Innovation system capacities	
3.13.1. Localizing Innovation	85
3.13.2. Financing to link Research with Innovation	87
3.13.3. Support Innovation Culture	89
Topic 14. Due Diligence	
3.14.1. Promoting Participation of Women in Science and Innovation	
3.14.2. Negative Environmental Impact	93 3
	5

3.14.3. Achieving SDGs	95
Topic 15. Expectation of All Partners to Adhere to a Best Practice Standard In Research Collaborations	
3.15.1. Partner Requirements for Fair Research Partnerships	96
3.15.2. Sponsor Requirements for Fair Research Partnerships	98
3.15.3. Fair Research Contracting	100
Other Aspects of "Fair Sharing of Benefits, Costs and Outcomes"	102
Summary table for Domain 3 : Fair sharing of Benefits, Costs and Outcomes	112
Overall Summary table for actions to be taken	114
Appendix A – Full listing of RFI Domains, Topics and Indicators	118

# Glossary

ALC	African Lusophone Countries
CADI	Centre for Academic Development and Innovation
CPLP	Community of Portuguese Speaking Countries
COHRED	Council on Health Research for Development
EDCTP	European and Developing Countries Clinical Trials Partnership
FAIR	Enhancing fairness in 'research partnerships' in tropical infectious diseases research
FIOCRUZ	Oswaldo Cruz Foundation
GHTM	Global Health and Tropical Medicine
H2020	Horizon 2020
IHMT/NOVA	Institute of Hygiene and Tropical Medicine, NOVA University of Lisbon
INASA	National Institute of Public Health, Guinea-Bissau
INS	National Institute of Health, Mozambique
LMIC	Low and Medium Income Country
PECS-CPLP	Strategic Plan for Health Cooperation in the CPLP
РМВОК	Project Management Body of Knowledge
R&D	Research and Development
REC	Research Ethics Committee
RESP – CPLP	Network of Public Health Schools of the CPLP
RETS-CPLP	Network of Technical Health Schools of the CPLP
RFI	Research Fairness Initiative
RIDES	Health Research and Development Networks of the CPLP
RINSP	Network of Public Health Institutes of the CPLP
SDG	Sustainable Development Goal
SOP	Standard Operating Procedure
SUS	Unified Health System, Brazil

TDR	Special Programme for Research and Training in Tropical Diseases
UDI-A	University Development and Innovation – Africa

# Foreword

IHMT/NOVA was founded in 1902 and has been at the forefront of research on tropical diseases, often within networks and partnership projects, warranting IHMT/NOVA a strong international presence. IHMT/NOVA has been recognized at national and international level for its scientific quality in postgraduate teaching and excellence in specific areas of research that are focused on tropical medicine and health-related areas of global relevance.

IHTM/NOVA is a key institution in Portugal and in the Community of Portuguese Speaking Countries – *Comunidade de Países de Língua Oficial Portuguesa* - CPLP – in terms of health for development, infectious tropical diseases, training and capacity building. IHMT/NOVA is undergoing a process of revision of its management and laboratory processes and COHRED's RFI provided us with a tool to review our partnership processes, systematizing our ongoing efforts to establish fair partnerships with our collaborating institutions. It also gave us a tool to systematize with our partners the dialogue about what our partnerships should look like.

At IHMT/NOVA we believe that we share the task of contributing to build a global moral research community<sup>1</sup>. In fact, the RFI provides us with a framework grounded on guiding principles supportive of fair decision-making, relevant to the current moral challenges of academic researchers, institutions and networks – such as the CPLP. The adoption of the RFI supports our moral and ethical profile in an increasingly global world, allowing us to reconfigure our administrative and contractual behavior in light of this new scenario and beyond our own local context.

IHMT/NOVA is proud to become the first institution in the Portuguese speaking world to prepare and publish an RFI Report. We congratulate COHRED for this initiative and we are commited to disseminating the RFI in the near future.

Paulo Ferrinho

IHMT/NOVA Director

June 2018

<sup>&</sup>lt;sup>1</sup> Sachs J. What is a Moral University in the 21<sup>st</sup> century? Speech at Columbia Universityu, March 30, 2015, at <u>http://jeffsachs.org/2015/04/2748/</u> accessed on 12-06-2015.

# **Executive Summary**

The Research Fairness Initiative was developed by COHRED to allow institutions to analyze and improve their behavior in research partnerships. This report assesses how the *Instituto de Higiene e Medicina Tropical* (IHMT/NOVA) carries out its research partnerships, following the model provided by the Research Fairness Initiative, focused on three main domains: 1) fairness of opportunity; 2) fair process; 3) fair sharing of benefits, costs and outcomes.

In order to complete the report, data was obtained through structured interviews with key informants, based on the RFI script, informal conversations with other relevant staff and the analysis of already existing reports. A number of examples related to RFI domains, such as case studies and research projects, are included in the Report.

The report highlights the fact that IHMT/NOVA has been historically engaged with Institutions, mostly but not exclusively, within the *Comunidade de Países de Língua Oficial Portuguesa* (Community of Portuguese Speaking Countries, CPLP), leading several activities of capacity and network building and advanced training of human resources for health.

During the preparation of this report, it became clear that IHMT/NOVA's stance on research partnerships is not based on Standard Operating Procedures (SOPs) or written guidelines but on an overarching *ethos* that stems from past experiences and from IHMT/NOVA's strategic mission as a world-changing institution.

Recognizing the need and the opportunity to transform IHMT/NOVA's knowledge management system, various actions will be taken in the next 2 years to strengthen IHMT/NOVA's policies and approaches related to research partnerships, data sharing, public engagement with science and dissemination of IHMT/NOVA's research, layed out in the *summary table for actions to be taken*.

Some examples that highlight IHMT/NOVA's commitment with research fairness include:

a) The promotion of the RFI within the CPLP (including the preparation of a special issue of IHMT/NOVA's scientific journal; the translation of relevant RFI guides into Portuguese), leading to a CPLP declaration to adopt the RFI;

b) The ongoing efforts towards the consolidation of a national health diplomacy and philosophy for global health development;

c) Numerous research projects and initiatives focused on capacity building, knowledge translation, public engagement with science and health and open science;

d) Current efforts towards the implementation of guidelines and SOPs related to data property and sharing.

# Motivation for becoming an RFI reporting institution

IHMT/NOVA's vision is to extend our leadership capacity as a R&D institution in the specific field of global health and tropical medicine, addressing present and future health problems and bridging across CPLP's R&D institutions in a worldwide context. Our aim is to become a privileged partner for health & scientific cooperation and development, respecting our national heritage of being at the forefront of new developments and societal challenges aligned with key-concepts of sustainable development goals.

Research partnerships are fundamental to attain research capacity in LMICs, and research networks play a fundamental role in innovation, especially in the field of health. Over the past 20 years, some guidelines and diplomatic efforts have been put in place to improve North/South partnerships - the RFI contrasts with previous initiatives by providing institutions with a metric/framework to assess how they behave in partnerships and to guide the transition to fairer collaborations.

IHMT/NOVA has been involved in the discussions on the development, applicability, usefulness and implementation of the RFI right from the onset. The RFI, as a compliance tool, was built through the careful input of stakeholders and various institutions around the world. We have attended several meetings organized by COHRED, as well as academic conferences that proved to be crucial for successfully developing this initiative. The IHMT was, in fact, one of the first R&D institutions in the world to publicly discuss its experience with the RFI: we have done so at the International Conference on Research for Development (ICRD 2017) in Bern, Switzerland, in September 2017, and more recently in New York, where we discussed the RFI at the CUGH Global Health Conference 2018, in March 2018.

IHMT/NOVA has also played a key role in campaigning for and disseminating the RFI at several meetings of the CPLP. We are pleased to inform that, thanks to our efforts, the RFI was adopted by the Ministers of Health of CPLP Member States at their biennial meeting in Brasilia, Brazil, in October 2017. This led to the recommendation that the guiding principles and mechanisms of the RFI should be built into the scientific work of RINSP and RIDES. In April 2018, at the second joint meeting of RIDES, representatives of all member States reiterated that the guiding principles and mechanisms of the RFI should be actively incorporated within RIDES.

The commitment to building a global moral research community and the theme of 'Fair Research Partnerships' is part of IHMT/NOVA's strategy for 2018-2022 and we are committed to disseminating the RFI through research projects, publications, conferences and advocacy within the Portuguese society and CPLP. The RFI process allows us to rethink how we deal with partners and the wider society, and we look forward to transforming our research management system in the next two years, strenghtening our role as a global institution commited to equity and fairness.

# **DOMAIN 1: FAIRNESS OF OPPORTUNITY**

## *Topic 1. Relevance to the communities – in which the research is done*

### 1.1.1. Research Priorities in Communities where Research is Conducted

1.1.1. *A.* Describe if and how does your organisation determine the research priorities of countries and populations in which you conduct research ?

The research priorities of IHMT/NOVA and populations where research is conducted are determined as follows:

a) There is a strategic plan focused on the Global Health and Tropical Medicine R&D Centre that defines research groups, topics and priority domains.

b) IHMT/NOVA's postgraduate programs define topics that can be researched by MA and PhD students, aligned with areas of expertise of its academic staff.

c) Priorities are also determined by various networks, namely those within the CPLP (Community of Portuguese Speaking Countries), such as  $PECS-CPLP^2$ ,  $RINSP - CPLP^3$ ,  $RESP - CPLP^4$  and  $RETS-CPLP^5$ .

d) There are numerous institutional partnerships with Universities (such as Universidade Agostinho Neto in Angola and Universidade Eduardo Mondlane in Mozambique).
 IHMT/NOVA incorporates academic staff from those Universities as Invited Professors and actively collaborates with National Institutes of Public Health.

e) IHMT/NOVA's Administration Council and Advisory Council include various partners from Southern Institutions.

f) IHMT/NOVA often addresses capacity building requests from its partners and carries out training activities to support them in the preparation of research proposals and articles.

<sup>&</sup>lt;sup>2</sup> Strategic Plan for Health Cooperation in the CPLP

<sup>&</sup>lt;sup>3</sup> Network of National Institutes of Public Health of the CPLP

<sup>&</sup>lt;sup>4</sup> Network of Public Health Schools of the CPLP

<sup>&</sup>lt;sup>5</sup> Network of Technical Health Schools of the CPLP

g) The Congress of Tropical Medicine is a biannual event that supports travel and accommodation expenses of researchers within the CPLP, leading to the development of various collaborative projects.

1.1.1. B. If your organisation has SOPs, Policy directives or other written Guidelines that provide instruction or guidance to research leaders in your organisation on how to establish and deal with local and national research priorities in partner settings, please attach or provide URL. If you do not have such documents, state that here.

There are no SOPs for this topic. There is the strategic plan of IHMT/NOVA, which determines its research priorities, as well as a form that must be filled in order to submit a research protocol. PECS' program includes guidelines on research and collaboration priorities within the CPLP.

Link to the website of IHMT/NOVA's research Centre, Global Health and Tropical Medicine - <a href="http://www.ihmt.unl.pt/en/ghtm-global-health-and-tropical-medicine/">http://www.ihmt.unl.pt/en/ghtm-global-health-and-tropical-medicine/</a>

IHMT/NOVA's strategic plan – [ENCLOSED]

Link to the strategic plan for health cooperation within the CPLP (PECS)https://www.cplp.org/id-2367.aspx

LinktothemostrecentversionofPECShttps://www.cplp.org/Admin/Public/DWSDownload.aspx?File=%2fFiles%2fFiles%2fFiler%2f1\_CPLP%2fSaude%2fIVRMin%2fIVRMSPECSCPLP-201720vfinal.pdf

1.1.1.C. What steps does your organization intend to take in the next one or two years to improve its policy and practice of addressing the research priorities of communities and countries where collaborative research is being conducted ?

IHMT/NOVA will develop a transparent and annual assessment of key research priorities with its main partners. The first assessment will be done in March 2019. Based on the results, we will define specific strategies, training, protocols relevant to IHMT/NOVA and its partners. The overall plan for this will be ready for actioning by October 2019.

#### 1.1.2. Actions if there are No Research Priorities

*1.1.2.A How does your organization proceed when – with reasonable efforts – it cannot find "credibly set and regularly updated" research priorities for the population concerned ?* 

IHMT/NOVA's research priorities are clearly defined – there is a strategic plan, a research Centre with priority research lines, groups, networks established with CPLP partners, therefore this issue does not apply.

IHMT/NOVA's priorities are perfectly well identified and its activities also respond to specific requests by partners from the South.

1.1.2.B. If your organisation has SOPs, Policy directives or other written Guidelines that provide instruction or guidance to research leaders in your organisation on how to proceed if there are not research priorities, please attach or provide URL. If you do not have such documents, state that here.

There are no SOPSs for this specific topic beyond IHMT/NOVA's strategic plan, which defines its research priorities, as well as procedures on how to submit proposals for funding agencies.

1.1.2.C. What steps does your organization intend to take in the next one or two years to improve its policy and practice of conducting research in situations where there is no clearly formulated research agenda? If you provide efforts to support countries or regions to develop their research agenda as part of your engagement, please state that here and provide examples..

IHMT/NOVA will reinforce its policy of supporting other countries to define their research agendas, following previous work on the development of national agendas in Mozambique, Angola and Guinea-Bissau. An internal meeting will take place in June 2019 to develop a position paper (ready by July 2019) on how to support countries to develop their research agendas.

#### 1.1.3. Justification to Research Low Priority Topics

1.1.3.A. If it is decided that a research programme does not directly address one of the top 10 research priorities of the population in which research will be conducted, how does your organization justify the choice of this population?

IHMT/NOVA has its own priorities which guide all work developed by the Institution. IHMT/NOVA has its strategic plan but is also committed to addressing partners' requests; if a specific partner requests the development of a specific research project which is not aligned with the top 10 research priorities, that research project may constitute an opportunity to develop capacity building actions. If IHMT/NOVA has the availability and technical competence to do so, that request will be addressed. Recent examples include the coordination of a network to support research and intervention on chronic respiratory diseases in the CPLP as well as the development of projects in the field of health tourism.

1.1.3.B. If your organisation has SOPs, Policy directives or other written Guidelines that provide instruction or guidance to research leaders in your organisation on how to proceed if the research they are leading does not address local or national research priorities, please attach or provide URL. If you do not have such documents, state that here.

All research programs carried out by IHMT/NOVA's researchers must be approved by the Institutional Ethics Council and by the Ethics Committees of participant countries (see domain 2). Projects are also evaluated by the funding agency and, on a first stage, submitted to internal assessment. If some aspect is clearly not aligned with the interests of local populations or with scientific or health priorities, measures will be taken by the Ethics Council or the Scientific Council, including rejecting the proposal.

1.1.3.C. What steps does your organization intend to take in the next one or two years to improve its policy and practice of conducting research in situations where the research your conduct does not clearly address the research agenda?

As previously mentioned, IHMT/NOVA's 2018-2022 strategy is clear and no additional steps are required to address this issue.

#### **Topic 2. Early engagement of partners**

#### 1.2.1. Relationship between the 'Main/Lead/Sponsoring' and 'Other' Partners

1.2.1.A. Often there is one main partner – deciding on focus, financing or implementation or any combination. Other partners are then included as essential to achieve the research goals of the main partner. What is your organisation's policy and approach for early engagement of partners, enabling them to influence focus, financing and implementation? Describe clearly how your organisation deals with partners that mainly provide access to study populations and contribute much less to expertise, financing or focus.

IHMT/NOVA does not engage in "scientific safaris", unlike other institutions that travel to the South with the aim of collecting samples and preparing publications, alienating colleagues from the South and disregarding local priorities.

Partnerships are always established in a flexible and symmetrical way. There is an initial idea that entails collaborating with partners in a variety of countries, both from the North and the South, and the number of partners is predetermined by funding schemes. The idea is discussed in a participatory way between potential partners, whose input is included in the proposal.

Sometimes funding schemes imply that the scientific coordination is located in the South but the administrative coordination is in the North; however, in the case of projects funded by TDR or EDCTP, it is preferable that the whole coordination is located in the South, in order to increase the chances of obtaining funding.

Small Institutions such as IHMT/NOVA often avoid coordination roles, as they usually imply preparing numerous reports to be delivered to funding agencies – those are time consuming tasks in the context of large partnerships.

When partnerships are established there is always a history of collaboration with those institutions, and there is trust between partners, therefore any conflicts or issues are easily solved – the only rules that exist regarding this aspect are those determined by funding agencies.

*instruction or guidance on dealing with inequality in partnerships, please attach or provide URL. If you do not have such documents, state that here.* 

At the moment there are no SOPs or written guideline on these aspects, although there is a strategic plan that is explicitly focused on "fair partnerships" (see Domain 2 for more details).

1.2.1.C. What steps does your organization intend to take in the next one or two years to improve its policy and practice of dealing fairly and productively with the relationships in unequal partnerships?

IHMT/NOVA has already started identifying existing partnerships, memoranda of understanding and protocols, with the aim of analyzing their aim, separating those that are merely political from partnerships that IHMT/NOVA aims to reinforce and nourish. This task is being coordinated by the Project Management Office and will be completed by December 2018.

Other actions include the current adoption of the RFI, which promoted an internal discussion on these issues, as well as the development of a policy paper laying out IHMT/NOVA's institutional policy on what research for development means and how researchers and institutional partners should behave under that ethical and political framework. This policy paper will be available in June 2019.

#### 1.2.2. SOPs for Partner Inclusion in Study Design

*1.2.2.A.* Describe how and in what stage of design your organisation includes all partners in the decision making of study design and the development of study protocols and programmes ?

This process takes place during the preparation of research proposals to be submitted. Partners' involvement depends on their interest, willingness and availability.

A senior researcher from the IHMT/NOVA mentioned that while preparing one of the first research proposals submitted for funding with the European Commission, in the early 1990s, with Institutions from Mozambique, Portugal and South Africa, researchers from Portugal and South Africa travelled to Mozambique, where a workshop was organized. Another example, in 2015, concerns a project (which unfortunately was not funded) with the Karolinska Institutet, McMaster University and institutions from South Africa, Mozambique and Brazil. Since this was a large consortium, and although during the initial phase researchers relied on conference calls and emails, afterwards a physical meeting had to be arranged.

More recently, a project submitted to EuropeAID with the National Institute of Health (INS) of Mozambique and the Fundação Oswaldo Cruz (Fiocruz), Brazil, not only involved email exchanges but also a preliminary meeting to determine goals, and the whole process was highly interactive.

In that sense, the initial involvement depends to a large extent on who had the initial idea and whether participant institutions aim to assume an active role during the preparation stage. This applies to partnerships with institutions from the South and the North.

1.2.2.B. If your organisation has SOPs, Policy directives or other written Guidelines that provide instruction or guidance on (early) engagement of all partners, irrespective of their actual contribution in the study, please attach or provide URL. If you do not have such documents, state that here.

IHMT/NOVA's strategic plan encompasses its guiding values, determining how it engages with its partners, and the recommendation is always to involve local partners as much as possible. The best standard operating procedure is a set of values and a basis of trust that allows work to be conducted without SOPs, privileging an ethos supported by experience and examples of previous collaborations.

1.2.2.C. What steps does your organization intend to take in the next one or two years to improve its policy and practice of early engagement and inclusion of partners in decision making?

IHMT/NOVA includes partners in its decision-making processes. Its Advisory Council includes partners as invited professors, which illustrates a concern with CPLP societies. IHMT/NOVA's students and alumni also reinforce this connection. In any CPLP country there are former students of IHMT/NOVA playing important roles in the fields of health and Academia, which reinforces that trust capital, supporting the development of collaborative work.

In October 2019 a meeting will be organized to identify focal points for CPLP countries, in order to ease and better structure and systematize these processes, providing potential partners with a better access to relevant expertise from the IHMT/NOVA in order to develop future collaborations. These focal points will be clearly identified and publicly available on IHMT/NOVA's website – <u>www.ihmt.unl.pt</u> by December 2019.

#### 1.2.3. SOPs for Supportive Actions to Partners

1.2.3.A. Does your organisation have a standardized approach to identify areas of strength and weakness in partners included in research programmes, and, if so, what actions follow identification of gaps in expertise to design and implement studies? In instances where you are the 'weak partner' – describe how your organisation requires capacity building efforts for your own institution as part of the partnership agreement.

There are no SOPs or standard approaches for this specific field. Project memoranda and protocols establish partnership rules.

Collaborations are established with specific groups based on their research expertise, therefore this question does not apply. In case some weaknesses are detected there are always strong training and capacity building programs linked to IHMT/NOVA's activities, from technical courses to doctoral programs, and it is usually through these training programs that local deficiencies – in case they exist - are addressed.

IHMT/NOVA is a tropical medicine institution, recognizing that what it can offer to partners from the Global South is the knowledge of cutting edge technologies that is not available to them - in terms of practical experience they are usually much more advanced. IHMT/NOVA is used, within this collaborative process, to an asymmetric relationship, but this asymmetry is ambivalent - partners are better in certain fields and IHMT/NOVA has more experience in other areas. The concept of "reverse innovation" illustrates particularly well this scenario.

In November 2017, IHMT/NOVA submitted a research proposal to the TWINNING-WIDESPREAD call of the European Commission, with the aim of learning with partners from the South, reinforcing IHMT/NOVA's Clinic of tropical diseases and offering in return training and capacity building.

IHMT/NOVA is aware that it can only survive as a tropical medicine institution if it is recognized that the main competencies on this theme are not in Portugal but in countries from the Global South. What IHMT/NOVA can offer is training, systematization and technologies - countries from the South have a much richer empirical experience.

1.2.3.B. If your organisation has SOPs, Policy directives or other written Guidelines that provide

instruction or guidance on supportive actions, especially to low and middle income country partners, please attach or provide URL. If you do not have such documents, state that here.

#### There are no SOPs or written guidelines on this topic.

1.2.3.C. What steps does your organization intend to take in the next one or two years to improve its policy and practice of early engagement and inclusion of partners in decision making?

#### IHMT/NOVA's approach is twofold.

First, there is currently a concern with the development of strategies for global health by countries from Europe and the Global North, aiming at defining their stance on global health threats. Countries such as Switzerland, Denmark and Norway have developed their own diplomacies for global health, led by their respective foreign affairs ministers. In October 2019 IHMT/NOVA will organize a meeting with selected Members of the Portuguese Parliament and representatives of the Ministry of Health and Foreign Affairs to prepare a memorandum on this topic.

Second, IHMT/NOVA will contribute to the establishment of a philosophy on effective development collaboration. Following several meetings over the years on this topic in Paris and Busan, IHMT/NOVA will organize an academic meeting in Portugal on effective development focused on global health around May 2020. This task is currently being coordinated by a member of IHMT/NOVA's Advisory Council, and will result in the development of a philosophy/approach that will guide IHMT/NOVA and inform Portuguese diplomacy.

# **Topic 3. Making Contributions of All Partners Explicit – Fair Research Contracting**

#### 1.3.1. Role Clarification in Research Partnerships

1.3.1.A. Describe how your organisation arrives at an explicit statement on roles, responsibilities, fair contributions and fair benefits for all partners during the (4) key stages of the research: design, implementation, writing up, and follow up actions – before research begins? In particular, how are the following areas addressed.:

Previous questions already address the issue of study design, namely regarding the development of proposals and the identification of priorities. There are no standard procedures to determine actions. Usually an idea emerges, from IHMT/NOVA researchers or from partners, and whoever proposes the idea leads the process, taking the initiative to distribute tasks. In a flexible way it is guaranteed that everything that needs to be done regarding study design and submission procedures and timelines is tackled. It is crucial to ensure that whoever wants to participate in a project takes part in its design – IHMT/NOVA does not work with partners who do not contribute to the design and conception of projects.

The distribution of tasks for implementation follows the plan included in the research proposal. There are work packages that indicate who will be coordinating them, tasks that are assigned to specific partners, tasks that imply issues such as who is in charge of coordinating the preparation of a publication, aspects related to training, etc. - during the implementation and publication stages there is a script that can followed.

Regarding publications, there are international guidelines concerning authorships that clearly define who should the first or last author. Sometimes a partner from the South demands that, since the article is focused on their country, the first author should be from the South, but that argument is discussed and afterwards a decision is made. Every time the project is carried out in a hospital, there is an attempt to involve hospital staff as co-authors.

Concerning feedback to studied populations, this is a complicated issue and depends on the interest of the population itself. Projects developed with medical students are characterized by greater feedback because the population is engaged, and public outreach activities are often carried out. As an example we can mention a project about diarrhea in São Tomé and Príncipe. After the conclusion of the project and subsequent publications, there was a meeting where results were publicized, involving not only researchers but also medical staff such as nurses and relevant health actors.

Regarding follow-up actions, IHMT/NOVA aims at transforming the world, and there is a commitment towards the follow-up of research findings in order to attain social impacts and dissemination. Existing devices of knowledge management and translation include direct contacts with leading health officers in all Portuguese speaking countries, providing technical support to health ministries in fields such as strategic planning, health regulation and the training of human resources for health.

1.3.1.B. If your organisation has a SOPs, Policy directives or other written Guidelines that provide instruction or guidance on dealing with sharing of authorship, feedback requirements to communities / populations where research was conducted, and requirements for follow up actions after research findings have been announced, please attach or provide URL. If you do not have such documents, state that here.

There are no specific SOPs for this field, although there is a strategic plan that outlines IHMT/NOVA's general approach, and there are also guidelines linked to funding agencies that support research projects. Furthermore, there are international guidelines that IHMT/NOVA adheres to.

1.3.1.C. What steps does your organization intend to take in the next one or two years to improve its policy and practice of dealing with these three issues in particular : sharing of authorship, feedback requirements to communities / populations where research was conducted, and requirements for follow up actions after research findings have been announced ?

In terms of authorships there are no aspects needing to be improved, as they are based on internationally recognized principles.

Regarding follow-up actions there is currently a project that was submitted to an EDCTP call to allow decision makers to become aware of IHMT/NOVA's research, allowing it to effectively affect policy making. Although this particular project wasn't funded, it will be implemented, and the aim is to ensure that from June 2019 onwards all relevant projects coordinated by the IHMT/NOVA must result in at least one policy paper.

IHMT/NOVA will improve the field related to feedback requirements to populations where research is conducted. Recently there was a great investment in science communication, and annually there are approximately 450 to 500 news on the IHMT/NOVA; however, most of its research is carried out in countries without direct access to communication apart from the Internet. In January 2020 selected researchers from IHMT/NOVA will discuss these issues in order to develop a memo with clear recommendations on science communication and public engagement with science.

#### 1.3.2. SOPs for Conflict Resolution

1.3.2.A. Describe how your organisation deals with conflicts arising after the commencement of a research collaboration. What mechanisms are in place ? How are these mechanisms developed and agreed upon between partners ?

There are no institutionalized mechanisms dealing with conflict resolution. Usually when a conflict arises – for instance, related to a co-authorship – IHMT/NOVA resorts to dialogue. In case dialogue doesn't work, a senior colleague will evaluate the situation and prepare a conflict resolution proposal. In some cases the Ethics Council is involved to formulate a dispute resolution.

So far, it was not necessary to resolve conflict by resorting to courts or other legal instances, as these conflicts are tackled through dialogue, the intervention of senior researchers or eventually through the Ethics Council.

1.3.2.B. If your organisation has a SOPs, Policy directives or other written Guidelines that provide instruction or guidance on dealing with conflicts in research collaborations, please attach or provide URL. If you do not have such documents, state that here.

IHMT/NOVA has no explicit rules on conflict resolution, and usually it acts as outlined in 1.3.2.A.

1.3.2.C. What steps does your organization intend to take in the next one or two years to improve ability to minimize risk for conflict to arise, to maximize ability for early conflict resolution, and to minimize the impact of any conflicts that do arise.

Conflict resolution is not a priority topic for IHMT/NOVA, therefore a change of policy is not expected. As mentioned by the director, in over 25 years of research there has been no serious conflict, when disagreements emerge these are tackled through dialogue, and they are part of the regular process of developing collaborative ideas, projects and publications.

#### 1.3.3. Making Potential Impact Explicit Before Starting Research

1.3.3.A. Describe the measures that your organisation has in place to state the explicit benefits to participant populations – at time of study and partnership development. Description of benefits can be short-, medium- and long-term, and also in the form of direct benefits to study populations and in terms of health or research system development.

IHMT/NOVA works in the field of public health, and its ultimate goal is the enhancement of health and wellbeing of populations. Health problems researched by IHMT/NOVA are located thousands of miles away, therefore contact with involved populations is established through partners from the South. Those partners usually have their own mechanisms of communication and IHMT/NOVA collaborates with them. IHMT/NOVA trusts in the ability of its partners to carry out those tasks.

On the other hand, research proposals submitted for funding always include objectives, impacts and expected benefits, which have to be clarified in the proposal itself, therefore this is another mechanism to safeguard these issues.

IHMT/NOVA is not involved in large projects which aim at generating information with potential economic impact, such as large vaccine or drug trials, therefore this question hasn't been systematically debated.

1.3.3.B. If your organisation has a SOPs, Policy directives or other written Guidelines that provide instruction or guidance on creating explicit benefit descriptions before the research starts, please attach or provide URL. If you do not have such documents, state that here.

#### There are no written recommendations on this topic.

1.3.3.C. What steps does your organization intend to take in the next one or two years to improve on this, i.e. to make sure that a priori total benefit statements become part of contracts and partnership agreements?

IHMT/NOVA has its own strategy which defines research groups and agenda, as well as other research themes related to the impact envisioned by IHMT/NOVA. This strategy, clearly defined, is fundamental to determine IHMT/NOVA's impact.

Every proposal submitted for funding includes an expected impact assessment. The Advisory Council is the main device to think about social impact, including researchers from all Portuguese speaking countries. Moreover, the biannual congress is an important fora of collaboration and dissemination of knowledge, entailing the participation of CPLP representatives and partners.

Within the next 1-2 years IHMT/NOVA will transform its knowledge management structure. From June 2019 onwards, all relevant projects coordinated by the IHMT/NOVA must result in at least one policy paper in order to ensure that every research project not only leads to of journal articles but can also inform the actions and behavior of institutions and stakeholders, in order to attain a more robust impact on health systems, thus increasing IHMT/NOVA's social impact.

## **Topic 4. Ensuring That Matching and Other Co-Financing Mechanisms Do Not Undermine Opportunities For Fair Participation of All Partners**

### 1.4.1. Equal Co-financing

1.4.1.A. How does your organisation deal with differences in spending ability between partners? In particular, how does your organisation decide what would be 'fair' co-financing in terms of financial contribution to total research expenditures. How does it deal with substantial differentials in currency strength and organisational budgets of partners in a partnership? What would you consider 'fair' or 'equitable' if there are great differentials in purchasing power?

Funding aspects are always defined according to the tasks and timeline related to the Consortium, following the rules of the funding agency. IHMT/NOVA relies on external funding to carry out research projects, thus following the rules and recommendations of funding agencies, which also require the preparation of financial reports.

Salary scales often cause some problems between partners. Salaries in the North are much higher than in the South, and in fact these unbalances may generate some discomfort. However, given Portugal's semi-peripheral context, this unbalance takes place not only with institutions from the South (where salaries are lower) but also from the North (with much higher salaries than Portugal). We try to adapt salary scales to national contexts.

In the absence of funding agencies there are rules for *per diems* provided by the European Union which are followed. IHMT/NOVA does not create new rules to deal with these situations, resorting to existing rules, procedures and tables.

1.4.1.B. If your organisation has a SOPs, Policy directives or other written Guidelines that provide instruction or guidance on dealing with differences in financial contributions and in financial capacity to contribute, please attach or provide URL. If you do not have such documents, state that here.

IHMT/NOVA has no SOPs for these issues, the rules of the call and of the funding agency are followed. Generally, and concerning *per diems*, the rules of the European Union are followed, available here:

https://ec.europa.eu/europeaid/sites/devco/files/perdiems-2017-03-17\_en.pdf

1.4.1.C. What steps does your organization intend to take in the next one or two years to improve its policy and practice of dealing with the relations between research partners that contribute or that can only contribute in unequal measure?

These issues transcend IHMT/NOVA and its researchers, and there is no room to substantially transform the policy and practices related to these matters. These are systemic issues entwined with North/South unbalances, and since IHMT/NOVA relies on funding agencies it has to follow the rules defined by those entities in order to obtain competitive funding.

#### 1.4.2. Alternatives to Equal Co-financing

1.4.2.A. How does your organisation measure non-financial contributions of partners? Is this made explicit? How is equality in partnership defined beyond 'equal co-financing' or 'co-financing in proportion to benefits?

IHMT/NOVA depends on competitive funding to carry out research projects. IHMT/NOVA, as leading partner, or as a Consortium member, obtains research funding through external agencies. In that sense, equality in partnership is not assessed based on the financial contribution of each partner but on the basis of aspects related to coordination and project tasks. As previously mentioned, that distribution is defined according to a set of rules determined by the funding agency itself and by the specific abilities and competences of partners, selected on the basis of their expertise and previous collaborations with the IHMT/NOVA.

1.4.2.B. If your organisation has a SOPs, Policy directives or other written Guidelines that provide instruction or guidance on dealing with non-financial contributions to research collaborations, please attach or provide URL. If you do not have such documents, state that here.

#### There are no SOPs, policy directives or written guidelines on this issue.

1.4.2.C. What steps does your organization intend to take in the next one or two years to improve its policy and practice of dealing with measuring non-financial contributions to research collaborations and how this will be used to off-set financial contributions?

No additional steps will be taken regarding this particular issue, since this is a field that transcends IHMT/NOVA's scope and capacity, as it depends on funding agencies to carry out research projects.

#### 1.4.3. Research Outside National Priorities and Co-financing

1.4.3.A. In research collaborations where the research does not directly address established national research or development priorities, it cannot be expected that national budgets are used to 'match' partner contributions. How does your organisation discount the absence of matching in defining equity in the partnership in such cases – i.e. consider partners equal in spite of low or no financial or other contributions?

As previously mentioned, IHMT/NOVA doesn't make any financial contributions, therefore this issue doesn't apply – IHMT/NOVA establishes equal partnerships with institutions that also do not make financial contributions, as funding is always dependent on external agencies.

State funding covers 80% of IHMT/NOVA's salaries, and the rest is obtained through competitive funding. This self-funding is not sufficient to allow any type of significant co-financing. The only existing co-financing is related to researchers' Persons/Month, as IHMT/NOVA has no ability to make any type of direct financial contribution.

Moreover, if a certain project is not aligned with national health or development priorities in general, its development is not justified, unless it's a specific request by one or various partners, as previously mentioned.

1.4.3.B. If your organisation has a SOPs, Policy directives or other written Guidelines that provide instruction or guidance on dealing with requirements for financial or non-financial contributions when research does not address institutional or national priorities of a partner, please attach or provide URL. If you do not have such documents, state that here

As previously mentioned, there are no rules or the need to develop rules for this specific aspect.

1.4.3.C. What steps does your organization intend to take in the next one or two years to improve its policy and practice of dealing with requirements for partner contributions when not dealing with institutional or national priorities?

IHMT/NOVA already has a strategic plan that defines its research priorities. Projects or activities that are not aligned with that strategic plan are only justified following specific requests, for instance in a field related to capacity building, and only if there's available funding, something that is contemplated by the strategic plan, therefore this issue does not apply to IHMT/NOVA.

### *Topic 5. Recognition of Unequal Research Management Capacities Between Partners and Providing For Appropriate Corrective Measures*

#### 1.5.1. Research Management Capacity

1.5.1.A. Does your organisation conduct research management capacity assessments of partners – specifically when your organisation is the 'lead' partner in a research programme? How is adequacy and competence assessed, and are there mechanisms to increase this capacity as part of the partnership?

IHMT/NOVA also works in the field of management of health services and National Health Institutes. IHMT/NOVA has a course for clinical directors, a course for heads of nursing staff and a course for intermediary leaders, and in that sense capacity building is conducted – mainly the field of capacity building of human resources working at hospitals and national health institutes.

There are also frequent requests for capacitation from financial managers. Both the National Institute of Health of Guinea-Bissau and Mozambique requested capacity building actions in that field. The directors of their financial services underwent an internship of three months at IHMT/NOVA, and the head of the financial services of IHMT/NOVA went to Guinea-Bissau and Mozambique to carry out the implementation of some aspects.

These capacity building actions always follow specific requests – IHMT/NOVA does not carry out a research management capacity evaluation of partners, as this could be understood as a type of neo-colonialism, clashing with the epistemological approach of the Institute, focused on trying to learn with the South. As IHMT/NOVA is part of the network of national institutes of health of the CPLP (RINSP-CPLP), there are frequent requests from Guinea-Bissau, Mozambique and Cape Verde to help them improve and set up their respective Institutes, and only in those cases assessments and recommendations are made. RINSP's action plan as well as PECS also provide a framework for capacity building activities,

Within the context of research projects no assessments are conducted to determine whether partners are competent or not in a specific field, since IHMT/NOVA only works with competent partners, regardless of their geographic location. However, usually in projects that are submitted in collaboration - as projects submitted to the European Commission, EDCTP, etc. - there is funding allocated to knowledge transfer for project management.

In the recent past, examples of knowledge transfer included capacity building regarding a wide range of aspects, such as communication, administration, financial management and elearning, involving IHMT/NOVA's staff.

1.5.1.B. If your organisation has a SOPs, Policy directives or other written Guidelines that provide instruction or guidance on evaluating research management capacity (within your own organisation or in partner organisations), please attach or provide URL. If you do not have such documents, state that here.

There are no written guidelines on how to evaluate research management capacity, as IHMT/NOVA only carries out "evaluation" or "capacity building" when there is a formal request or within the scope of a research project. Capacity building evaluation is also an integral part of action plans of several of our networks such as RINSP and PECS.

On the other hand, those SOPs/directives wouldn't make sense, as they would imply that all partners should be evaluated prior to starting a collaborative project, generating additional costs.

Some researchers mentioned that they resort to the PMBOK [Project Management Body of Knowledge https://www.pmi.org/pmbok-guide-standards] as a guide for project management.

All information related to RINSP can be found here - https://www.cplp.org/id-3518.aspx

Link to the most recent version of PECS https://www.cplp.org/Admin/Public/DWSDownload.aspx?File=%2fFiles%2fFiler%2f1\_CPL P%2fSaude%2fIVR Min%2fIVRMS PECS CPLP-2017 20 vfinal.pdf

1.5.1.C. What steps does your organization intend to take in the next one or two years to improve its policy and practice dealing with research management assessment and taking of supportive actions as part of research collaborations?

IHMT/NOVA only assesses research management as an academic activity. As previously mentioned, some collaborative projects already include a capacity building component. Other capacitation actions are developed following specific requests, and supported by funding managed by our partners.

IHMT/NOVA is interested in expanding the field of evaluation and consulting, and requests are frequently received to develop evaluations. Those evaluations are consulting services that are converted into academic work, and this field of research is part of IHMT/NOVA's strategy.

It is estimated that there will be an increase in the demand of these actions of capacitation of research management by local institutions, as obtaining funding is an increasingly competitive process that demands an enhanced research management ability. IHMT/NOVA's director will prepare a memorandum in November 2019 laying out IHMT/NOVA's policy on supportive actions.

#### 1.5.2. Financial Management Capacity

1.5.2.A. Does your organisation conduct a financial management capacity assessment or audit of partners – specifically when your organisation is the 'lead' partner in a research programme? How is adequacy and competence assessed, and are there mechanisms to increase this capacity as part of the partnership? What internationally accepted accounting practice to you use, and which do you require that your partners use – if you are the 'lead' partner?

Collaborations must follow the rules and regulations determined by funding agencies, such as the European Commission. Sometimes funding agencies request a certification of the financial responsibility of partners, as well as certificates that there are no debts or financial risks that could jeopardize the partnership. For instance, EDCTP demands that information on the financial capacity of partners should be provided. When partner institutions are unable to provide financial training, EDCTP itself carries out training activities, as recently occurred in South Africa.

As previously mentioned, IHMT/NOVA has organized training activities on the financial management of projects, which involved various bureaucratic and financial aspects. Beyond those demands, IHMT/NOVA doesn't develop any kind of assessment of financial management capacities, and partners do not evaluate IHMT/NOVA either.

1.5.2.B. If your organisation has SOPs, Policy directives or other written Guidelines that provide instruction or guidance on evaluating financial management of research capacity (within your own organisation or in partner organisations), please attach or provide URL. If you do not have such documents, state that here.

There are no recommendations or internal guidelines on how to evaluate the financial management capacity of partners. IHMT/NOVA follows existing rules provided by research funders.

1.5.2.C. What steps does your organization intend to take in the next one or two years to improve its policy and practice dealing with financial management assessment and taking of supportive actions as part of research collaborations?

No changes will be made regarding this policy. It's not acceptable for IHMT/NOVA to approach a partner mentioning that it will be evaluated as an a priori condition to establish a partnership. On the other hand, it's also not acceptable that there is an evaluation demand by a partner as a condition to establish a partnership.

As an Institute of Hygiene and Tropical Medicine this is not IHMT/NOVA's goal, and IHMT/NOVA doesn't engage in forms of assessment beyond requests or the demands of funding agencies.

#### 1.5.3. Contracting and Contract Negotiation Capacity

1.5.3.A. Does your organisation assess contracting and contract negotiation capacity of partners – specifically when your organisation is the 'lead' partner in a research programme? How is adequacy and competence assessed, and are there mechanisms to increase this capacity as part of the partnership – especially before contracts are signed?

IHMT/NOVA does not evaluate its partners. IHMT/NOVA works with already known partners. When new partnerships are established this is through already existing partners that introduce us to new institutions. In that sense, there is no need – not even the capacity – to evaluate partners prior to contacting them.

IHMT/NOVA's research is funded by external agencies, such as the European Commission, the Bill and Melinda Gates Foundation and EDCTP, which are in charge of preparing contracts.

Assessments always follow explicit requests, as evaluation projects and/or consulting activities, never as part of the process of establishing a partnership.

1.5.3.B. If your organisation has a SOPs, Policy directives or other written Guidelines that provide instruction or guidance on evaluating research contracting capacity and on supportive measures your organisation can provide or require to increase gaps, please attach or provide URL. If you do not have such documents, state that here.

There are no written guidelines on this issue and they wouldn't make any sense, the same arguments mentioned in 1.5.2.B apply here.

1.5.3.C. What steps does your organization intend to take in the next one or two years to improve its policy and practice dealing with deficiencies in contracting capacities between partners in a research collaboration?

No change will be carried out in this specific field, for the same motives mentioned in 1.5.2.C.

#### Other Information Related to Increasing "Fairness of Opportunity"

In selecting 5 topics and 15 indicators of 'Fairness of Opportunity', the RFI is inevitably oversimplifying in the pursuit of optimizing its cost-effectiveness. Your organisation may well make other contributions to improving the participation of all concerned in research at relevant stages of study development. Please describe any actions, current or past, that reflect your intent and impact in this area. This can be in the form of case-studies, actual examples, reports or third-party comments concerning such efforts.

#### **Example 1**

Collaborative process during the design phase of the LusoAfro-Bioethics project, funded by EDCTP

While preparing a project funded by the EDCTP on ethics and health research within the CPLP (see Domain 2), various meetings with stakeholders who would benefit from this project were organized, namely with Professor João Schwalbach – the president of the National Bioethics Committee for Health of Mozambique. Initially he was questioned about Mozambique's main needs, and following his responses more contacts were established with other representatives of bioethics committees of hospitals in Mozambique. Five joint meetings were organized and partners from Mozambique identified and mapped their main needs.

In Cape Verde the same process was undertaken, but in that particular case partners didn't have already established Bioethics Committees, which meant that there was a need to develop those devices at the University level, justifying their interest and involvement in the proposal. In the case of Angola a similar process took place.

This process was highly interactive, aiming at designing a project that addressed specific needs of partners from the South, thus eliciting a concern with fairness of opportunity, especially with the development of projects attending to local priorities.

#### Example 2

During the 2013 dengue outbreak in Angola there was a patient diagnosed at IHMT/NOVA's Clinic, which, in Portugal, led to a higher public concern with this issue. Following that diagnosis, collaborations with Angolan Institutions and with the Health Ministry of Angola were developed, and IHMT/NOVA collaborated and provided technical support. Within the spirit of "reverse innovation", these collaboration actions were also aimed at the capacitation and improvement of IHMT/NOVA's Clinic, in case more patients were diagnosed in Portugal.

#### Example 3

During the 2014-15 Ebola outbreak, IHMT/NOVA established a task force to support Portuguese speaking countries, organizing meeting with children from schools in Cape Verde by videoconference. There were also members of IHMT/NOVA who traveled to hospitals in Cape Verde and Guinea-Bissau to provide counseling and advice on how to respond to the threat of this hemorrhagic fever.

This was a set of initiatives that aimed at communicating to society health issues outside Portugal and that weren't necessarily the result of IHMT/NOVA's research. The aim was to look at research and knowledge and communicate them in a useful, practical and pedagogic manner, involving a wide range of social actors including children and hospital staff.

#### Example 4

Publication of special issue of Anais do Instituto de Higiene e Medicina Tropical on Research Fairness in Research on Health for Development This special issue, focused on the RFI, will be outlined in detail in Domain 3, understood as a form of dissemination of the RFI within the CPLP. However, it should be underlined that this special issue included various articles focused on Domain 1 – Fairness of Opportunity. We highlight two articles here:

Carvalho, António; Nunes, João Arriscado; Hartz, Zulmira (2017), "Saúde para o Desenvolvimento, Parcerias de Investigação e Equidade: uma revisão de literatura" (Health for Development, Research Partnerships and Equity: a literature review), Anais do Instituto de Higiene e Medicina Tropical, 16, 2, 93-104.

In this article the authors prepare a literature review stemming from the evidence base created by COHRED related to domain 1 of the RFI – Fairness of Opportunity, which allowed IHMT/NOVA and readers of this special issue to become aware of the best practices in this specific domain.

#### Abstract:

Despite the recent efforts of the United Nations in the enactment of global partnerships for development, at the moment there are no concrete tools to assess the dynamics of international research partnerships in the health domain. The Research Fairness Initiative (RFI) aims at filling this gap, and in order to do so it collected a wide range of documents and practices which constitute an evidence base on the best practices regarding research partnerships, particularly in the field of health.

In this article we will carry out a literature review on the evidence base regarding the domain of Fairness of Opportunity (1). The literature we will analyse includes journal articles, reports, policy papers and various guidelines, among others. The various topics underlying this domain include themes such as the relevance to communities, early engagement of partners and fair research contracting and co-financing.

Through the selection of the most relevant documents, we will reflect on the most relevant questions, definitions and solutions in the domain of fairness of opportunity, analyzing the ways in which the RFI promotes a paradigm shift in research partnerships in health and research and development in a broader sense.

#### Article 2:

Lapão, Luís; Arcêncio, Ricardo (2017), "Boas práticas de equidade em investigação em Saúde Pública: exemplos do Brasil e Portugal" (Good Practices of Equity in Public Health Research: Examples from Portugal and Brazil). Anais do Instituto de Higiene e Medicina Tropical, 16, 2, 39-46.

In this article, two researchers – one from the IHMT/NOVA and another one from the University of São Paulo, Brazil – reflect on issues of fairness of opportunity related to public health. Regarding IHMT/NOVA's role, the authors highlight capacity building involving managers of human resources for health within the CPLP; the development of telemedicine services within the CPLP; the implementation of good practices of managing antibiotics in Portugal and the CPLP.

#### Abstract:

Aligned with the Research Fairness Initiative, the Universidade Nova de Lisboa, and the Universidade de São Paulo have sought, over the years, to consolidate research equity in public health. These initiatives must be contextualized to promote a robust adoption, especially in the field of Public Health. Public Health displays two main characteristics that turn it into a field of science particularly sensitive to issues of fairness: the relevance of Public Health interventions and the fact that it is progressively a global issue, attending to the pressures of globalization, global warming and multiculturalism. Health research is an important and complex activity. Even more when patients and various countries are involved, triggering challenges that must be tackled and mitigated. COHRED's framework was applied to better map fair research practices in Portugal and Brazil.

Research Fairness in Public Health is an ethical duty widely embraced by numerous researchers. The lack of resources often undermines that fairness, but the adoption of more rigorous collaborative models can be helpful.

#### Example 5

If domain 1, related to Fairness of Opportunity, displays a concern with concerns related to transboundary partnerships, it is also important to mention and focus on issues linked to epistemological and political inequalities that often characterize R&D.

Following recent concerns with "responsible research and innovation", the model of public understanding of science, often coined as the deficit model, has been questioned. This model justifies the rejection of innovations in science, technology and health as stemming from the "ignorance" of the lay public, prescribing various forms of "education" and "communication" as an antidote, converting citizens to new developments and applications.

New approaches in communication and public engagement with science, technology and health favor upstream approaches, where citizens actively participate in R&D processes, as in the case of "citizen science". The project "MosquitoWeb", carried out at the IHMT/NOVA since 2014, fosters these new approaches.

#### Summary

Mainland Portugal is on the route of invading mosquitoes. These species are very aggressive and bothersome and transmit diseases such as dengue or yellow fever and, more recently, Zika and Chikungunya. Portugal has a surveillance program coordinated by the General Health Directorate. However, it is known that citizens play an important role in the early identification of exotic species of mosquitoes. Ten million active citizens far outweigh the efficiency of all entomologists Portugal.

Analytic tools also play a major role here. By allowing researchers to 'measure' and compare previous readings with current findings, they can easily detect where mosquito populations are more active (not all carry virus). This will allow them to start 'attacking the problem' early, avoiding an expansion of the mosquito population beyond containment and preventing the spread of epidemic diseases, like the 2004 dengue outbreak in Madeira.

# Summary table for Domain 1 : Fairness of Opportunity

The table below indicates the actions to be taken in the short term regarding specific indicators. Priority levels are from 1 (very important in the short term) to 3 (less important in the short term).

Indicator number	<b>Priority Level</b>	Actions to be taken	Due date		
Topic 1 : Relevance to communities – in which research is done					
1.1.1.	High	Transparent and annual assessment of key research priorities with its main partners	March 2019		
		Overall plan ready for actioning	October 2019		
1.1.2.	Medium	Internal meeting on how to support countries to develop their research agendas	June 2019		
		Position paper on how to support countries to develop their research agendas	July 2019		
1.1.3.		Not applicable			
Topic 2 : Early engagement of all partners – in deciding about aims, methods, implementation					
1.2.1.	Medium	Internal assessment of existing partnerships, memoranda of understanding and protocols	December 2018		
		Policy paper laying out IHMT/NOVA's institutional policy on research for development	June 2019		
1.2.2.	High	Meeting to identify focal points for CPLP countries	October 2019		
		Focal points are publicly available on IHMT/NOVA's website	December 2019		
1.2.3.	Medium	Meeting with selected Members of the Portuguese Parliament and representatives of the Ministry of	October 2019		

Indicator number	Priority Level	Actions to be taken	Due date
		Health and Foreign Affairs to prepare a memorandum on global health policy	
		Organization of academic meeting in Portugal on effective development focused on global health	Around May 2020
Topic 3 : Making contributions of all p	partners explicit – fair research contrac	cting	
1.3.1.	High	From June 2019 onwards all relevant projects coordinated by the IHMT/NOVA must result in at least one policy paper	June 2019
		Memo with clear recommendations on science communication and public engagement with science	January 2020
1.3.2.		Not applicable	
1.3.3.	High	From June 2019 onwards, all relevant projects coordinated by the IHMT/NOVA must result in at least one policy paper	June 2019
Topic 4 : Ensuring that matching and	other co-financing mechanisms do not	undermine opportunities for fair participation	on of all partners
1.4.1.		Not applicable	
1.4.2.		Not applicable	
1.4.3.		Not applicable	
Topic 5 : Recognition of unequal resea	arch management capacities between j	partners and providing for appropriate correct	ctive measures
1.5.1.	Medium	Memorandum laying out IHMT/NOVA's policy on supportive actions.	November 2019
1.5.2.		Not applicable	

Indicator number	Priority Level	Actions to be taken	Due date
1.5.3.		Not applicable	

# DOMAIN 2: FAIR PROCESS

# **Topic 6. Minimizing Negative Impact of Research Programmes on Health and Other Systems**

#### 2.6.1. Assessing Potential Harm of Research

2.6.1.A. Research programmes that have large budgets or human resources and infrastructure requirements may reduce the ability for normal service delivery because of reducing access to staff and facilities, for example. This may be particularly noticeable in, but not limited to, collaborative health research in low income countries. Does your organisation conduct a 'system impact assessment' of partners – specifically when your organisation is the 'lead' partner in a research programme – and particularly when conducting research in low-resource environments? How is potential negative impact assessed, and how is it communicated between partners?

IHMT/NOVA does not assess its partners. The only assessments made are aligned with the indicators, milestones and deliverables of each project and related to externally requested consulting. In case a project or a consulting activity entails assessing the impact of a certain Institution, that assessment will be made. In a recently submitted project to the TWINNING-WIDSPREAD call of the H2020 program of the European Commission (see end of domain 3 for more details), assessing the impact in partner institutions related to the adoption (or not) of RFI principles was included as an activity. Beyond that context of research or consulting it is not fair to evaluate partners, as previously mentioned, since partnerships are developed on a basis of trust.

2.6.1.B. If your organisation has SOPs, Policy directives or other written Guidelines that provide instruction or guidance for impact assessment of research collaborations in which your organisation is a partner, please attach or provide URL. If you do not have such documents, state that here.

There are no recommendations or written guidelines on this topic, as previously justified.

2.6.1.C. What steps does your organization intend to take in the next one or two years to improve its policy and practice related to impact assessment of research collaborations?

There was never the need to develop guidelines on this topic, and these will only be developed in case IHMT/NOVA starts participating in large scale projects involving human resources of national health systems of specific countries. In May 2020 IHMT/NOVA's Scientific Advisory Board will assess whether further actions are required.

#### 2.6.2. Reducing the Negative Impact of Research

2.6.2.A. Should the 'system impact assessment' demonstrate potential for unintended harm to people or services, does your organisation have policies or mechanisms in place that enable research leaders to put in place preventive actions rapidly?

As mentioned in 2.6.1, IHMT/NOVA does not carry out a "system impact assessment", therefore this question does not apply. Given IHMT/NOVA's background, there are no institutionalized mechanisms to tackle this issue beyond the usual requirements and demands linked to projects and funding applications.

2.6.2.B. If your organisation has SOPs, Policy directives or other written Guidelines that provide instruction or guidance or budgets to prevent negative impact of research collaborations, please attach or provide URL. If you do not have such documents, state that here.

# As previously mentioned, these issues do not apply to IHMT/NOVA.

2.6.2.C. What steps does your organization intend to take in the next one or two years to improve its policy and practice related to preventing negative impact, if any, of research collaborations – especially in low-income countries and populations?

As previously mentioned, these questions do not apply to IHMT/NOVA.

#### 2.6.3. Compensation for Unintended (negative) Consequences of Research

2.6.3.A. If, in spite of taking adequate preventive action, there are substantial negative consequences of research programmes for individuals, populations or countries, how does your organisation deal with this effectively and adequately? How does it involve all partners? What compensatory mechanisms does your organisation make available?

This issue was never raised due to IHMT/NOVA's history, and does not apply to this institution. In case something eventually happens, since IHMT/NOVA is a public institution the only chance of making available compensatory mechanisms is through a legal process, but this is a hypothetical case that has never occurred.

2.6.3.B. If your organisation has SOPs, Policy directives or other written Guidelines that provide instruction or guidance or budgets to provide compensation for negative impact of research collaborations, please attach or provide URL. If you do not have such documents, state that here.

There are no SOPs, policy directives or other written guidelines on these issues.

2.6.3.C. What steps does your organization intend to take in the next one or two years to improve its policy and practice related to preventing negative impact, if any, of research collaborations – especially in low-income countries and populations?

The chances of an event of this kind happening are slim, therefore no steps will be taken to alter this policy.

# Topic 7. Fair Local Hiring, Training and Sourcing

### 2.7.1. Local Staffing

2.7.1.A. How does your organisation decide on hiring local staff? What criteria are being used for bringing in expatriate staff in international collaborations? Does your organisation have standards or SOPs related to hiring and remuneration of local staff?

IHMT/NOVA does not interfere with these processes. Projects have their own tasks, the national team has its own direction and coordination and hiring criteria are well defined in project proposals – local teams have full autonomy to hire new researchers. As a form of courtesy, the profile of applicants that are in the selection process is shared, but the hiring decision is made by the local institution.

2.7.1.B. If your organisation has SOPs, Policy directives or other written Guidelines that provide instruction or guidance on hiring local or expatriate staff, or that deal with remuneration for each group, please attach or provide URL. If you do not have such documents, state that here.

There are no SOPs, policy directives or written guidelines on this topic, local institutions have the final word on this.

2.7.1.C. What steps does your organization intend to take in the next one or two years to improve its policy and practice related to hiring local staff?

IHMT/NOVA is happy with the current approach.

#### 2.7.2. Local Sourcing of Consumables and Services

2.7.2.A. How does your organisation decide on bringing in consumables from outside the country in which research is being conducted? What criteria are being used? Does your organisation have standards or SOPs related to optimizing use of local materials?

Consumables to use in third countries are always ordered by national teams. Each institution has its own budget and all acquisitions are made according to it - IHMT/NOVA does not interfere in that process, unless requested to do so by its partners.

2.7.2.B. If your organisation has SOPs, Policy directives or other written Guidelines that provide instruction or guidance on local sourcing of consumables and services, please attach or provide URL. If you do not have such documents, state that here.

There are no SOPs, policy directives or other written guidelines on this issue, experience and common sense dictate that local institutions must be in charge of acquiring local consumables and services.

2.7.2.C. What steps does your organization intend to take in the next one or two years to improve its policy and practice related to local sourcing of consumables and services?

No changes of policy will be made, as the acquisition of products and services by local teams is the most adequate approach.

#### 2.7.3. Support for Local Capacity Development

2.7.3.A. Where there is lack of availability of local expert staff, or inability to produce consumables or services of sufficient quality to satisfy research standards requirements, what does your organisation do to increase local staff and/or increase ability to produce quality products and services locally?

IHMT/NOVA recognizes that there are inequalities in terms of scientific, administrative and economic abilities between institutions from the North and the Global South, but all research projects include a strong dimension of training – not only refresher courses but also the development new competencies. IHMT/NOVA receives interns and sends its staff to support partner institutions - these are the main capacity building mechanisms available at the moment.

Numerous former MA and PhD students have leading roles at health institutions of the CPLP, namely in Cape Verde, Angola, Mozambique and Guinea-Bissau.

2.7.3.B. If your organisation has SOPs, Policy directives or other written Guidelines that provide instruction or guidance on local sourcing of consumables and services, please attach or provide URL. If you do not have such documents, state that here.

There are no recommendations, written guidelines or SOPs on this matter. However, a strong dimension of capacity building is reflected in the preparation of research projects, collaboration protocols and in existing postgraduate programs.

2.7.3.C. What steps does your organization intend to take in the next one or two years to improve its policy and practice related to local sourcing of consumables and services?

As mentioned in 2.7.3.A., historically IHMT/NOVA has been engaged in training and capacity building on tropical infectious diseases, illustrated by the number of human resources for health in the CPLP trained by IHMT/NOVA. In that sense, no change of policy is required in this field - IHMT/NOVA will maintain existing policies.

#### Topic 8: Respect for the authority of local ethics review systems

#### 2.8.1. Research Ethics Approval

2.8.1.A. In many types of research, but particularly in research for health, research ethics review and approval is obligatory. In international collaborative research, multiple RECs/IRBs are engaged. Most ethics guidelines state or imply that the REC/IRB representing a country or population should have final say in approving research programmes. Does your organisation have SOPs dealing with the ethics review of research in which you participate? Does it specify the need for and process of finding local REC/IRB, and indicate where final responsibility for approval lies? Does it specify which international ethics guidelines are the basis for your organisation's policies and practices related to ethics review?

IHMT/NOVA's Ethics Council tackles all these issues. IHMT/NOVA's Ethics Council – one of two Ethics Committees of the NOVA University of Lisbon – supports IHMT/NOVA's researchers, their projects and other R&D centers of NOVA University of Lisbon that require ethical approval for their projects.

In the case of projects conducted in Portugal, Portuguese laws are followed. In case it is a study in Portugal that involves informed consent, questionnaires or surveys in the field of health, the project will necessarily have to be approved by the Ethics Council of IHMT/NOVA. If a student or researcher carries out a project in another country – such as Mozambique or Angola – they must obtain local ethical approval, submitting a request to the Ethics Committees of the countries where research is developed. In case the proposal has been approved by an Ethics Committee of a third country (such as a CPLP country, which is frequent), IHMT/NOVA will automatically accept the resolution without demanding a new ethical revision by IHMT/NOVA. However, and due to the context of Ethics Committees in CPLP countries, additional ethical approval is needed in those countries even when there is already approval by a Portuguese Ethics Committee, since there are no shared SOPs.

2.8.1.B. If your organisation has SOPs, Policy directives or other written Guidelines that provide instruction or guidance on ethics review requirements in collaborative research projects, please attach or provide URL. If you do not have such documents, state that here..

IHMT/NOVA's Ethics Council makes available a series of Standard Operating Procedures such as forms, national and international recommendations and relevant legislation. All that material is available online for researchers, postgraduate students, collaborators and members of the general public at <a href="http://www.ihmt.unl.pt/organizacao/conselho-de-etica/">http://www.ihmt.unl.pt/organizacao/conselho-de-etica/</a>

2.8.1.C. What steps does your organization intend to take in the next one or two years to improve its policy and practice related to increasing respect for local ethics review of research in which your organization is a partner?

IHMT expects that within the next 1-2 years the EDCTP project that is currently running and deals with Ethics Committees within the CPLP (see end of domain 2) will allow the development of shared SOPs between different Ethics Committees within the CPLP, easing the process of obtaining ethical approval for research, thus having a positive impact on research partnerships. In May 2020 IHMT/NOVA's Ethics Council will assess whether these shared SOPs are already in place, and if any further actions are necessary to foster their implementation.

#### 2.8.2. Supporting Local Research Ethics Review Capacity

2.8.2.A. Particularly, but by no means exclusively, in low- and middle-income countries or populations, there may be a lack of expertise, facilities, software or administrative competence in local RECs/IRBs. This may seriously hamper local participants but also may cause unnecessary delays in the approval process. Does your organisation have resources and plans available with which to support REC/IRB capacity to conduct high quality ethics review efficiently, such as the use of digital platforms, or access REC/IRB administrative support on-line?

IHMT/NOVA has historically been involved in the development of local capacity for ethical revision through collaborations with COHRED. IHMT/NOVA's current director is part of the committee of international supervision of the RhinoEthics program, having participated in various meetings in Geneva and Mozambique.

The project funded by EDCTP, currently taking place, will strengthen and develop Ethics Committees in Angola, Mozambique, Cape Verde and Guinea-Bissau, producing various documents, helping those institutions to structure models of protocol and informed consent, providing training in relevant fields to members of those Ethics Committees through workshops.

Three courses of e-learning in Portuguese will be organized in order to tackle existing needs regarding the submission of protocols to Ethics Committees. IHMT/NOVA and the Faculty of Law of the NOVA University of Lisbon are in charge of organizing three online courses in Portuguese aiming at the training of members of Ethics Committees of participant institutions from the CPLP.

2.8.2.B. If your organisation has SOPs, Policy directives or other written Guidelines that provide instruction or guidance on supportive actions for ethics review capacity in partner institutions or countries, please attach or provide URL. If you do not have such documents, state that here.

There are no specific SOPs in this field, there is a strategic plan and IHMT/NOVA is part of several networks within the CPLP, always entailing a dimension of capacity building. Existing SOPs are related to the procedures of the Ethics Council in order to evaluate IHMT/NOVA's research projects. IHMT/NOVA's mission is to ensure that partner institutions are strengthened by established partnerships.

2.8.2.C. What steps does your organization intend to take in the next one or two years to improve its policy and practice related to increasing respect for local ethics review of research in which your organization is a partner?

The field of Ethics Committees is highly relevant due to the exponential increase of Faculties of Medicine in the CPLP, which an associated research dimension – in the short term, Ethics Committees will be a priority work field for these institutions. Moreover, there is also the emergence of Research Centers linked to National Institutes of Health, or dependent on them. In the next two years IHMT/NOVA will maintain and reinforce this line of work, supporting and strengthening the development of Ethics Committees in partner institutions, especially in Angola, Cape Verde and Mozambique, in light of the previously mentioned EDCTP project. In May 2020 IHMT/NOVA's Ethics Council will assess whether the EDCTP project led to the reinforcement of African Ethics Committees and if shared SOPs are already in place.

#### 2.8.3. Enabling Access to Global Expertise

2.8.3.A. Increasingly complex research is needed to deal with increasingly complex global health, environment and development problems. Even RECs/IRBs in well-resourced settings may have difficulty finding high level expertise able to provide competent ethical review of specific research project. Does your organisation have policies and resources to support all partners requiring additional ethics review capacity to obtain this independently of the main sponsor(s)?

IHMT/NOVA doesn't have financial resources or the ability to provide access to global expertise. As previously mentioned, in order to develop any activity it is necessary to obtain financial support from a funding agency, and it applies to this line of work in particular. The project currently running is funded by the EDCTP, IHMT/NOVA has no capacity to take care these actions without external funding, whether by funding agencies of by other institutions that request capacity building activities as a form of consulting.

Another example of these capacity building activities within the field of Ethics Committees that can be mentioned entails a request by the Ethics Committee of the National Institute of Health of Mozambique. A team of teaching and research staff from the IHMT/NOVA travelled to Mozambique in 2017, helping the local institution to structure, review and develop a script for protocol review. These actions were completely funded by the local institution – IHMT/NOVA has the ability to respond to these requests as long as they are funded locally or by a funding agency.

2.8.3.B. If your organisation has SOPs, Policy directives or other written Guidelines that provide instruction or guidance on supportive actions to provide additional ethics expertise to partner institutions or countries, please attach or provide URL. If you do not have such documents, state that here.

There are no specific SOPSs. As previously mentioned, collaborative projects include a dimension of capacity building, not only of local institutions but also of the IHMT/NOVA itself, as a form of "reverse innovation".

2.8.3.C. What steps does your organization intend to take in the next one or two years to improve its policy and practice related to providing high level ethics expertise to support ethical decision making in partner institutions or countries?

IHMT/NOVA's goal is, until May 2020, to submit at least 2 research proposals dealing with capacity building in the field of ethics expertise. It is expected that, in case some of these projects are funded, IHMT/NOVA will reinforce this emerging line of research.

#### Topic 9. Data Ownership, Storage, Access and Use

#### 2.9.1. Data Ownership Agreements

2.9.1.A. How does your organisation decide on data ownership agreements with all partners if your organisation is the 'lead' partner? And what requirements are in place for your own organisation to share in ownership even if your organisation is not the 'lead' partner? Does financial contribution matter when deciding on data-ownership and use?

This issue was problematic in the past, as researchers in the field of global health would engage in scientific safaris - at the moment that doesn't happen. IHMT/NOVA adheres to international regulations on these issues. There are protocols, rules on the use of data, repositories and IHMT/NOVA's biobank.

There is a learning process between North and South that demands the permanent involvement of the South and, on the other hand, there is the development of open science that allows access to data from countries such as Mozambique, Angola and Brazil to researchers that have never visited those places.

As an institutional policy, IHMT/NOVA encourages its researchers that when they publish an article on a certain country a collaborator from that specific country should be included. Although there are multiple regulations and norms, impact is always attained through the transformation of the institutional culture, involving scientific and collaborative dimensions.

2.9.1.B. If your organisation has SOPs, Policy directives or other written Guidelines that provide instruction or guidance for data ownership and sharing of this, please attach or provide URL. If you do not have such documents, state that here..

IHMT/NOVA's Scientific Council has recently developed a document on data property/ownership within the institution, which can be understood as the first step towards the discussion of data property outside the institution. There are also SOPs related to IHMT/NOVA's biobank and guidelines linked to the funding agencies supporting IHMT/NOVA's projects, such as the European Commission, which encompass data property and sharing, promoting Open Access.

# Document regulating data property within IHMT/NOVA – [ENCLOSED]

# Biobank's SOPs – [ENCLOSED]

2.9.1.C. What steps does your organization intend to take in the next one or two years to improve its policy and practice related to sharing data ownership?

Until June 2019 IHMT/NOVA will develop SOPs related to ownership and sharing of material and virtual data, following internal discussions and procedures that are currently taking place. The goal is a stronger systematization of this policy, resulting in a general regulation which will include SOPs for the Biobank, for surveys and for all data stemming from IHMT/NOVA's research.

#### 2.9.2. Material Transfer Agreements

2.9.2.A. How does your organisation decide on material transfer agreement, including storage and future use, between partners if your organisation is the 'lead partner'? And if you are not the 'lead' partner? Do you use internationally accepted MTAs or do you use other?

IHMT/NOVA uses international MTAs, proposed by IHMT/NOVA or by any other institution included in the partnerships. Afterwards, this process is reviewed by a legal expert to identify any problems, and is subsequently signed by the director or by a member of IHMT/NOVA's direction.

2.9.2.B. If your organisation has SOPs, Policy directives or other written Guidelines that provide instruction or guidance for material transfer agreements, please attach or provide URL. If you do not have such documents, state that here.

# At the moment there are no SOPs for material transfer agreements at the IHMT/NOVA.

2.9.2.C. What steps does your organization intend to take in the next one or two years to improve its policy and practice related to material transfer agreements?

The general regulation on data ownership (see 2.9.1.C), currently under discussion, will contemplate issues related to material transfer agreements, beyond already existing SOPs for the Biobank, and should be ready in June 2019.

#### 2.9.3. Rights of Use of Data for Publication

2.9.3.A. How does your organisation deal with rights of use of data from studies in which your organisation is a partner? What are the key considerations in sharing the rights of use of data, and ability to publish results, by all partners in a partnership?

Data property rights for publication are defined according to the project proposal. When IHMT/NOVA develops a project, in the proposal the resulting publications are mentioned, as well as who will coordinate their preparation, and a specific partner is mentioned.

Generally all partners are involved in the publication, but at the end of the process there will be a correction of co-authorship according to the effective participation of partners.

This is a mutual learning process, therefore it is necessary that each project has very well defined rules on who stores biological material, data stemming from surveys and questionnaires and how such data can be used. The best way to tackle this issue is case by case, project by project, resorting to existing good practices and tacit experience.

2.9.3.B. If your organisation has SOPs, Policy directives or other written Guidelines that provide instruction or guidance for publication agreements, please attach or provide URL. If you do not have such documents, state that here.

There are no SOPs beyond tacit rules linked to IHMT/NOVA's institutional policy – which includes all relevant partners as co-authors – and explicit guidelines that can be found in project proposals.

2.9.3.C. What steps does your organization intend to take in the next one or two years to improve its policy and practice related to publications agreements?

IHMT/NOVA will accompany the evolution of open science, following international accepted procedures related to these issues, ensuring that submitted proposals are sufficiently detailed and always include these good practices. By December 2018 GHTM's Scientific Commission will develop an internal memorandum on IHMT/NOVA's policy and practice on publications agreements.

During the next two years IHMT/NOVA will maintain capacity building activities related to the preparation of scientific publications, organizing at least one seminar/workshop on open science.

### Topic 10. Encourage full cost recovery budgeting and compensation for all partners

#### 2.10.1. Full Cost Recovery Budgeting

2.10.1.A. In collaborative research, existing services and infrastructure are often taken for granted. 'Overhead' or 'indirect' costs are not adequately compensating for existing staff, facilities and services. Does your organisation require that itself and its partners do 'full cost recovery' budgeting as opposed to 'marginal' or other incomplete recovery budgeting?

IHMT/NOVA is not able to demand its partners to carry out a full cost recovery budget. There are funders that do not allow overheads. IHMT/NOVA has implemented an institutional policy which prescribes overheads of at least 20% and maximum 25%. There are funding agencies, such as the Calouste Gulbenkian Foundation, which only allow overheads of 7%. IHMT/NOVA always requires overheads and usually partner institutions do the same, and all indirect costs should be included in those overheads. IHMT/NOVA has a fixed policy of overheads of 20 or 25%, and the same happens with other institutions. There is no policy or capacity to verify if what partner institutions require as overheads is sufficient to cover or not their indirect costs.

2.10.1.B. If your organisation has SOPs, Policy directives or other written Guidelines that provide instruction or guidance budgeting in research partnerships, please attach or provide URL. If you do not have such documents, state that here.

The only written recommendations/guidelines on this issue are the document which regulates institutional overheads, but only for IHMT/NOVA.

Document which regulates institutional overheads - [ENCLOSED]

2.10.1.C. What steps does your organization intend to take in the next one or two years to improve its policy and practice to achieve full cost recovery budgeting of partners in research collaborations?

R – IHMT/NOVA will not carry out changes regarding this policy.

#### 2.10.2. Improving / Standardizing Budgeting

2.10.2.A. Does your organisation assess competence of partners in providing standardized budgets? Does your organisation prescribe or recommend international research budgeting guidelines? Does your organisation provide financial expertise to partners needing support to prepare and manage research budgets?

IHMT/NOVA does not assess partners' competence in providing standardized budgets as an institutional policy. However, as part of its mission and strategy, frequently projects and programs are developed focusing on training and preparation of research proposals, and training on financial capacity building of partners has been provided, namely in terms of accountability to funding agencies.

Some of the partners involved include INASA in Guinea-Bissau and the National Institute of Health in Mozambique. There is an institutional concern with these aspects, but specific actions always follow a request from a partner, instead of being a mandatory demand by IHMT/NOVA as a condition to establish partnerships.

This field of capacity building – focused on supporting projects - is coordinated by a Full Professor and Deputy Director of the IHMT/NOVA. In the case of financial management, the head of the services division usually travels to those countries for training activities.

Regarding the previously mentioned EDCTP project on Ethics Committees, after IHMT/NOVA prepared its budget, it was explained to partners how they should prepare their budget in light of the standardized rules of the funding agency. These informal instances of capacity building are common during the preparation and submission of research projects.

2.10.2.B. If your organisation has SOPs, Policy directives or other written Guidelines that provide instruction or guidance budgeting and/or in supporting budgeting for research partners who may need it, please attach or provide URL. If you do not have such documents, state that here.

There are no SOPs, guidelines or written recommendations on this matter. There are the rules of the funding agencies regarding the preparation of budgets and there is also IHMT/NOVA's mission and strategy, which aims at including a dimension of capacity building

and training in established partnerships, encompassing not only research but also management dimensions (including financial aspects).

2.10.2.C. What steps does your organization intend to take in the next one or two years to improve its policy and practice to ensure competency and standardization of research budgeting in all partners in research collaborations?

IHMT/NOVA will continue its policy of supportting capacity building for the preparation of research projects, including training linked to the preparation of budgets. That will be the main field of training and capacity building within the next few years. Recognizing that the main funders of IHMT/NOVA's projects are agencies such as EDCTP, the European Commission and eventually UNAIDS, this is a field where IHMT/NOVA will invest, and until May 2020 IHMT/NOVA will be involved in at least 2 capacity building activities focused on research budgeting with CPLP partners.

#### 2.10.3. External Financial Audit

2.10.3.A. Does your organisation adhere to internationally accepted accounting practices, including the conduct of external financial audit on research programmes? Does your organisation require your partners in research to do the same, particularly, but not exclusively, when your organisation is the 'lead' partner?

As a Public Institution, IHMT/NOVA is obliged by the Laws of the Portuguese Republic to follow existing Portuguese accounting rules and practices. Moreover, large projects funded by the European Union have budget provision for external audits. At the IHMT/NOVA there are mechanisms for the external audit of its accounting practices and the Audit Court audits IHMT/NOVA on a regular basis. There are institutional rules of the IHMT/NOVA and the rules of the funding agency, usually even more demanding than the public audit rules.

Regarding partners, those are obliged by the funding agency to do so. The issue of financial control is complex and IHMT/NOVA avoids coordination roles to be safeguarded from potential financial responsibilities.

2.10.3.B. If your organisation has SOPs, Policy directives or other written Guidelines that provide instruction or guidance for external financial audit of research projects, please attach or provide URL. If you do not have such documents, state that here.

All Portuguese Public Institutions have SOPs for these matters. General Audits to the IHMT/NOVA follow the Law of the Portuguese Republic and the SOPs of the Audit Court and the NOVA University of Lisbon. Specific audits related to projects are of the full responsibility of funding agencies and their specific SOPs.

2.10.3.C. What steps does your organization intend to take in the next one or two years to improve its policy and practice to ensure competency and use of external financial audit for research collaborations?

No additional measures will be taken, existing procedures will be kept because they work correctly.

#### **Other aspects of "Fair Process"**

In selecting 5 topics and 15 indicators of 'Fair Process", the RFI is inevitably over-simplifying in the pursuit of optimizing its cost-effectiveness. Your organisation may well make other contributions to improving fairness in how research is conducted and research partnerships and programmes are implemented. Please describe any actions, current or past, that reflect your intent and impact in this area. This can be in the form of case-studies, actual examples, reports or third-party comments concerning such efforts. Attach documents here / provide URLs to any materials, case studies, examples, reports etc that you want to share to illustrate other actions your organisation is providing or requiring as part of increasing 'fairness of opportunity'.

#### Example 1

Research Project on Capacity Building of Ethics Committees within the CPLP

European and Developing Countries Clinical Trials Partnership (EDCTP) Grant: Strengthening Bioethics Committees in Lusophone African Region; ACRONYM: LusoAfro-BioEthics; Coordinated by Professor João Schwalbach (Comité Nacional de Bioética para a Saúde, Mozambique).

In the last decade, in Lusophone African countries, like in other countries from Africa, health research has increased and in response Research Ethics Committees (REC) have been established namely in Universities, Research Centres and Ministries of Health. But RECs in these countries still face a serious lack of staff trained in research ethics, and the "language divide" is an important barrier faced by them, as the main ethics educational resources are only available in English.

Being aware of these issues, IHMT/NOVA established a network of Bioethics Committees in Angola, Cape Verde and Mozambique in order to strengthen the ethical framework of African Lusophone Countries (ALC). This network supports the conduction of clinical and public health research, developing Standard Operation Procedures (SOPs), Protocol Review and international regulatory ethical and legal norms and standards, as well as the establishment of Institutional Review Boards where these do not exist.

#### Example 2

Following capacity building activities carried out by IHMT/NOVA with clinical directors in Portugal, there is a concern with adjusting the timetables of these activities to the work rhythm of hospitals. Capacity building activities usually start at 11 AM, since all participants start working at 8 o'clock until 10:30 AM. There is always the consideration that these are health professionals, recognizing their need to obtain training which translates in the improvement of hospital practices.

This recognition is reflected in a higher flexibility allowed by the new information technologies. As part of IHMT/NOVA's postgraduate programs, systems of e-learning and videoconference are used to allow students that are doing fieldwork outside Portugal to participate in an active way. Recently, a seminar was also organized in Cape Verde about antibiotics and stewardship, and IHMT/NOVA suggested the use of the telemedicine structure to allow members of other hospitals to participate, having carried out an adjustment of the schedule as suggested by these participants, implying a change of the calendar initially proposed by IHMT/NOVA.

#### Example 3

Regarding technology transfer and the sharing of research materials, there are cases where material is donated to partner institutions by IHMT/NOVA. One of those cases concerns a project on the study of behaviors and use of health in Cape Verde, which used equipment that was bought as part of this FCT-funded project, such as pedometers and scales. At the end, this equipment was donated to local participant institutions, recognizing that it was useful for them and that from the financial point of view the cost was low for IHMT/NOVA.

#### Example 4

Recently IHMT/NOVA has been strongly engaged with training in and popularization of open science, often involving CPLP's partners.

In June 2016, IHMT/NOVA and the Institut Français co-organized, in partnership with the Fundação Oswaldo Cruz (FIOCRUZ), in Brazil, and the National Agency of Innovation, on June 23, in Lisbon, a seminar on Big Data, Sustainable Development and Open Science.

The seminar included 57 participants, who attended the sessions physically and through streaming. There were two major themes under debate: the application of Big Data for research and the use of open science for technology transfer.

Within the scope of the first theme, the use of Big Data and open information in health was analyzed. Concerning the second theme, there was a discussion on innovation and social inclusion in low income contexts, as well as the automated analysis of patents.

In November 2017, a session entitled "Open Science and the requirements of funders: Open Access and Open Data in H2020" was organized by Pedro Príncipe of the University of Minho, and approximately 30 members of IHMT/NOVA attended, not only researchers but also administrative staff and postgraduate students.

# Summary table for Domain 2 : Fair Process

The table below indicates the actions to be taken in the short term regarding specific indicators. Priority levels are from 1 (very important in the short term) to 3 (less important in the short term).

Indicator number	Priority Level	Actions to be taken	Due date		
Topic 6 : Minimizing negative impacts of research programmes on health and other systems					
2.6.1.	Low	IHMT/NOVA's Scientific Advisory Board will carry out an internal assessment to decide if further actions are required on impact assessment of research collaborations	May 2020		
2.6.2.		Not applicable			
2.6.3.		Not applicable			
Topic 7 : Fair local hiring, training and sourcing					
2.7.1.		Not applicable			
2.7.2.		Not applicable			
2.7.3.		Not applicable			
Topic 8 : Respect for authority of loc	al ethics review systems	-			
2.8.1.	Medium	IHMT/NOVA's Ethics Council will assess whether shared SOPs for Ethics Committees are already in place, and if any further actions are necessary to foster their implementation	May 2020		
2.8.2.	Medium	IHMT/NOVA's Ethics Council will assess whether the EDCTP project led to the reinforcement of African Ethics Committees and if shared SOPs are already in place	May 2020		

Indicator number	Priority Level	Actions to be taken	Due date
2.8.3.	Medium	To submit at least 2 research proposals dealing with capacity building in the field of ethics expertise	By May 2020
Topic 9 : Data ownership storage, acces	s and use		
2.9.1.	High	IHMT/NOVA will develop SOPs related to ownership and sharing of material and virtual data, as part of its general regulation for data ownership	June 2019
2.9.2.	High	Development of general regulation on data ownership	June 2019
2.9.3.	Medium	GHTM's Scientific Commission will meet in order to develop an internal memorandum on IHMT/NOVA's policy and practice on publications agreements	December 2018
		At least one seminar/workshop on open science will be organized	Until May 2020
Topic 10 : Encourage full cost recovery	budgeting and compensation for all p	artners	
2.10.1.		Not applicable	
2.10.2.	Medium	IHMT/NOVA will be involved in at least 2 capacity building activities focused on research budgeting with CPLP partners	Until May 2020
2.10.3.		Not applicable	

# **DOMAIN 3: FAIR SHARING OF BENEFITS, COSTS AND OUTCOMES**

#### **Topic 11. Research system capacities**

#### 3.11.1. Training

3.11.1.A. As part of research partnerships, does your organisation require and/or provide resources for training and higher education of research staff? If so, how does your organisation determine priorities? What proportion of budgets is spent on training? Does your organisation specify requirements or budget allocations for this purpose?

IHMT/NOVA is a higher education institution, offering various postgraduate courses. The strategic goals of IHMT/NOVA entail the field of training. The mission of IHMT/NOVA is strongly aligned with training, which is included in projects as much as possible, related to the project itself or to an MA or PhD program, which might generate an output, a dissertation (PhD or MA dissertation).

IHMT/NOVA offers several doctoral programs: Biomedical Sciences; International Health; Tropical Medicine; Tropical Diseases and Global Health.

Currently, in partnership with Angola, a doctoral course in biomedical sciences was launched; there was also a project in Mozambique to set up an MA program in Tropical Medicine and International Health and also in Biosciences; as well as an MA program in the field of Public Health in Cape Verde. These initiatives included collaborating in terms of curriculum development and also teaching.

Since IHMT/NOVA doesn't have access to internal funding to develop capacity building activities, these are financed by projects, by students' fees and scholarships often granted by external funders.

When a proposal for a new postgraduate program is made, an economic study is always developed to assess what is the minimum number of students that would have to be enrolled in order to ensure the viability of the program.

Within research partnerships there is always the possibility of developing refresher courses, focused on updating certain existing competencies, aimed at technical and administrative staff, and other capacity building initiatives, aimed at the development of new competencies. There are also other instances of training stemming from MA and PhD programs.

Within research projects there are often demands by funders to link research to training and capacity building.

3.11.1.B. If your organisation has SOPs, Policy directives or other written Guidelines that provide instruction or guidance for budgeting on expert level training or providing such training in other ways, please attach or provide URL. If you do not have such documents, state that here.

IHMT/NOVA's strategic mission is strongly linked to teaching and capacity building, and its research projects also contemplate training. IHMT/NOVA's annual report includes a list of established partnerships related to capacity building, and the strategy for 2018-2022 indicates the ways in which doctoral programs are enmeshed with IHMT/NOVA's work and research.

[link to the Annual Report - <u>http://www.ihmt.unl.pt/instrumentos-de-gestao/relatorio-de-atividades/]</u>

GHTM's strategy for 2018-2022 – [ENCLOSED]

3.11.1.C. What steps does your organization intend to take in the next one or two years to improve its policy and practice of providing training to or require training from partners in research collaborations?

In February 2020 IHMT/NOVA's management will develop a memorandum stating that all collaborative research projects coordinated by IHMT/NOVA's researchers and involving partnerships with LMIC's will have to include some capacity building component, such as a training courses, workshops, seminars or other forms of training. IHMT/NOVA will continue

to strengthen the field of e-learning, allowing not only students but also and partners to benefit from distance training.

#### 3.11.2. Research Management

3.11.2.A. As part of research partnerships, does your organisation require and/or provide resources for training and higher education of staff concerned with managing research in partner-institutions? Consider 'research management staff' in a broad sense: financial, project management, communication, contract managers, community or business liaison, and more. If so, how does your organisation determine priorities? What proportion of budgets is spent on training? Does your organisation specify requirements or budget allocations for this purpose?

As previously mentioned, IHMT/NOVA is deeply involved with capacity building in research and project management, namely in the financial field, having provided training on financial management to the staff of institutions from Guinea-Bissau and Mozambique. The previously mentioned project on Ethics Committees (see Domain 2), also includes capacity building in the field of management. Recently IHMT/NOVA received a request for capacity building by the National Institute of Health of Mozambique, related to the preparation of reports, newsletters and science communication.

Capacity building in research management lacks its own budget, it is funded by research projects (supported by external funders) and/or by institutions that request capacity building actions, as previously indicated.

3.11.2.B. If your organisation has SOPs, Policy directives or other written Guidelines that provide instruction or guidance for budgeting for or providing expert level research management training, please attach or provide URL. If you do not have such documents, state that here.

There are no SOPs or written guidelines on this topic, but these capacity building actions are entwined with IHMT/NOVA's strategy and mission, as previously mentioned.

3.11.2.C. What steps does your organization intend to take in the next one or two years to improve its policy and practice of providing research management training to or require such training from partners in research collaborations?

Although IHMT/NOVA doesn't have its own budget to provide training on research management, it will continue to address requests for training and capacity building, aiming at the development of activities that can be implemented through the interaction between services, including interaction between Project Management Offices. As previously mentioned, an internal meeting will take place in June 2019 to develop a position paper (to be ready in July 2019) on how to support countries to develop their research agenda, and this position paper will also lay out IHMT/NOVA's stance on capacity building and research management training. IHMT/NOVA recognizes that without a strong research management capacity research projects can be affected, therefore it is fundamental to strengthen this area and to clarify the institutional policy on this issue. As previously mentioned, an internal memorandum will be circulated in February 2019 to recommend that all collaborative projects with LMICs incorporate a capacity building component.

#### 3.11.3. Increase (predictable) Funding

3.11.3.A. Small research organisations, research organisations in countries where there is little national research financing, or research and innovation 'start-ups' can successfully apply for competitive grants. Competitive grant-making favours large research bodies over smaller, and works better in research systems that have predictable basic financing mechanisms available to support periods in which organisations do not have access to competitive grants. Does your organisation support partners to become better able to access competitive grants, and to advocate national authorities to increase research system funding in a more predictable manner?

IHMT/NOVA carries out the aforementioned activities in the field of training and project design, increasing partners' ability of seeking and obtaining competitive funding. Other actions are established as part of research networks where IHMT/NOVA collaborates – the RIDES – such as RIDES of Malaria and Tuberculosis, which contemplate a strategic plan of cooperation in health. IHMT/NOVA is also part of the Network of National Institutes of Public Health of the CPLP, and whenever a meeting with ministers takes place there is always the advocacy of the need to secure funding for National Institutes of Health, the main agents of health research in those countries.

3.11.2.B. If your organisation has SOPs, Policy directives or other written Guidelines that provide instruction or guidance for supporting partners from resource-poor settings or require this to be provided from partners or sponsors in high income settings, please attach or provide URL. If you do not have such documents, state that here.

Written guidelines on these specific fields include GHTM's strategic plan and various documents associated with CPLP networks, including the strategic plan for health cooperation, available at <u>https://www.cplp.org/id-2370.aspx</u>

3.11.2.C. What steps does your organization intend to take in the next one or two years to improve its policy and practice of supporting the growth of predictable financing as part of collaborative research?

In the next 1-2 years IHMT/NOVA will maintain its approach, considered sufficient to support the growth of predictable funding.

# **Topic 12. Intellectual Property Rights and Tech Transfer**

#### 3.12.1. Technology Transfer

3.12.1.A. Does your organisation have SOPs or standard guidelines on technology transfer, specifically to partners in low- and middle-income countries and populations?

The field of technology transfer is explicitly mentioned in the new strategy of the R&D center of IHMT/NOVA for 2018-2022, GHMT, under the heading "technology transfer":

"Transfer of knowledge and technology. Within our mission to improve health in the tropics, we will continue to ensure research output transfer to tropical disease endemic areas, by supporting translation of relevant articles into Portuguese; preparing dissemination and policy briefs directed at specific stakeholders (health workers, veterinarians, health policy makers) or wider audiences to elicit relevant interventions. We will continue to strengthen local and regional technical & research expertise and capacity through local PhD and MSc programmes, as well as at IHMT/NOVA, and target PhD student fellowships at Portuguese-speaking African Countries."

3.12.1.B. If your organisation has SOPs, Policy directives or other written Guidelines that provide instruction or guidance on technology transfer to research partners, please attach or provide URL. If you do not have such documents, state that here.

GHMT's strategy for 2018-2022 contemplates this dimension, involving partners in this broad process.

3.12.1.C. What steps does your organization intend to take in the next one or two years to improve its policy and practice of technology transfer?

This field is part of IHMT/NOVA's scientific agenda, therefore the strategy developed for 2018-2022 will be followed.

#### 3.12.2. Sharing Intellectual Property Rights (IPR)

3.12.2.A. Does your organisation have explicit pre- and post-research discussions and negotiations with all partners concerning the sharing of IPR – now and in the future? How are disagreements dealt with? If you make no provision for sharing, how do you justify 'fairness' in research partnerships? While addressing this particular indicator and topic, reflect on all patents, trademarks, industrial designs and plant varieties that have or should have intellectual property rights linked to them. Familiarise yourselves with the right to file applications for registration at an international level for trademarks with the Madrid System, or the Hague System for industrial design protection.

Intellectual property rights are debated during the preparation of research proposals, in order to clarify these issues and to avoid future conflicts. In light of the directives of funding agencies, such as the European Commission, there is a growing tendency towards the availability of publications and data in open access.

3.12.2.B. If your organisation has SOPs, Policy directives or other written Guidelines that provide instruction or guidance sharing of IPR with research partners, please attach or provide URL. If you do not have such documents, state that here.

There is an internal document centered on intellectual property issues at the IHMT/NOVA. There are also specific rules of funders, related to these issues. Usually funders provide a template and these issues are tackled in the Consortium Agreement. GHTM's strategy for 2018-2022 includes written recommendations on intellectual property, namely the fact that articles should be available in open access.

Internal regulation on data issues - [ENCLOSED]

GHMT's strategy for 2018-2022 – [ENCLOSED]

*3.12.2.C.* What steps does your organization intend to take in the next one or two years to improve its policy and practice of sharing IPR with partners in research collaborations?

In March 2019 IHMT/NOVA will conduct an internal assessment of its policy and practice of sharing IPR with partners, with the aim of developing clear guidelines on these

topics. These guidelines will be included in the general regulation on data ownership, which should be ready in June 2019.

# 3.12.3. Contracting Support for IPR

3.12.3.A. Contracting for IPR is notoriously complex, and the field is rapidly changing. Even accomplished partners in high-income countries may not be able to remain up to date to the extent that competent contracting can be done. How does your organisation provide (as 'lead' partner) or require (as 'other partner') support for IPR contracting to ensure fairness?

IHMT/NOVA resorts to academic institutions and legal officers from NOVA to deal with property rights issues, as it has no expertise or sufficient experience to provide support in this particular field.

3.12.3.B. If your organisation has SOPs, Policy directives or other written Guidelines that provide instruction or guidance obtaining or providing IP contracting support, please attach or provide URL. If you do not have such documents, state that here.

# There are no SOPs or guidelines related to this issue.

3.12.3.C. What steps does your organization intend to take in the next one or two years to improve its policy and practice of supporting partners or requiring support from partners to better negotiate IPRs in research collaborations?

There are no plans to change IHMT/NOVA's approach related to this particular field.

#### **Topic 13. Innovation system capacities**

#### 3.13.1. Localizing Innovation

3.13.1.A. Does your organisation include in research contract negotiations and in research partnership agreements clear statements on how future spin-off economic activities resulting from the research will be shared with all partners?

IHMT/NOVA's first spin-off was created on January 10, 2018. IHMT/NOVA's director, Paulo Ferrinho, and the founder of Bio2health®, Gonçalo Alves, established a partnership aimed at promoting research and development activities in the control of hematophagous insects that play an important role in the field of public health.

The mission of this spin-off is to supply and develop products and services dedicated to monitoring and controlling those arthropods, ultimately becoming a relevant actor at the national level.

3.13.1.B. If your organisation has SOPs, Policy directives or other written Guidelines that provide instruction or guidance on localizing innovation capacity to research partners, please attach or provide URL. If you do not have such documents, state that here.

There is an internal regulation of IHMT/NOVA for the development of spin-offs and companies linked to the institution, developed in 2016, but it's not specific to research partnerships.

Internal regulation on spin-offs – [ENCLOSED]

*3.13.1.C.* What steps does your organization intend to take in the next one or two years to improve its policy and practice of localizing innovation system capacities?

Currently there is a module focused on innovation and entrepreneurship, common to all postgraduate programs. Until May 2020 IHMT/NOVA will organize at least two seminars/workshops on capacity building in the field of innovation aimed at academic and

administrative staff and postgraduate students. These events will be disseminated through existing CPLP networks.

#### 3.13.2. Financing to link Research with Innovation

*3.13.2.A.* Does your organisation take responsibility for financing actions following conclusion of research that deal with producing scalable products or services?

IHMT/NOVA is permanently concerned with research translation, in terms of practices and policies, ensuring that it has a wider societal impact. Some recent examples that illustrate this approach include, for instance, a seminar on planning and another one on regulation of the health sector, where partners from the South were invited to share experiences, becoming devices for knowledge sharing between partners.

As previously mentioned, a project was also submitted that aims at creating an evidence based platform for decision making. Regarding advocacy, this is a line of work where IHMT/NOVA has a series of direct contacts with policy makers in various countries, attempting to intervene in a robust fashion.

IHMT/NOVA is also involved in the creation of pilot projects with partners in countries where such innovation doesn't exist yet. Based on a recent request from Cape Verde, IHMT/NOVA will participate in the creation of a project on Family Health Teams.

There are various mechanisms to allow IHMT/NOVA's work to contribute to innovation in health systems and services, and the field of knowledge management and translation plays a fundamental role at the IHMT/NOVA.

3.13.2.B. If your organisation has SOPs, Policy directives or other written Guidelines that provide instruction or guidance on taking responsibility to follow through research knowledge generation with creating scalable products or services, please attach or provide URL. If you do not have such documents, state that here.

GHTM's strategy for 2018-2022 includes the improvement of health care and services in countries where IHMT/NOVA works and where its projects are carried out:

"(...) The GHTM mission is to produce knowledge on global health and tropical medicine, develop tools and strengthen health systems through excellence in research, training and systems implementation. Within this mission GHTM's specific aims are to:

- Reinforce local to global capacity to control vector borne diseases.
- Contribute to the control of HIV tuberculosis and opportunistic infections

- Support countries to strengthen health systems to achieve Universal Health Coverage (UHC) and improve health and well-being of vulnerable populations and

- Improve individual health care in high-disease burden settings."

*3.13.2.C.* What steps does your organization intend to take in the next one or two years to improve its policy and practice of moving beyond research to innovation?

The strategic plan of IHMT/NOVA's R&D unit for 2018-2022 will be followed, as it contemplates and aims at enhancing the social impact of its research.

#### 3.13.3. Support Innovation Culture

3.13.3.A. If your organisation does not provide finances to support innovation, does your organisation facilitate institutional or national discussions on this matter – supporting partners to make sure that research does not end with publications only?

Measures in place to ensure that IHMT/NOVA's research has a societal impact include its journal, in Portuguese – the Anais do Instituto de Higiene e Medicina Tropical, with a strong impact on CPLP Institutions – the biennial organization of a National Congress of Tropical Medicine, which usually counts with hundreds of participants from Portugal and the CPLP, and the previously mentioned seminars. Several projects running at the IHMT/NOVA have a strong component of implementation research.

IHMT/NOVA's knowledge management strategy aims at overcoming the divide between research production and utilization, aiming at the transformation of healthcare systems.

3.13.3.B. If your organisation has SOPs, Policy directives or other written Guidelines that provide instruction or guidance on stimulating transformation from knowledge into scalable products or services, please attach or provide URL. If you do not have such documents, state that here.

GHTM's new strategy for 2018-2022 includes written recommendations on knowledge and technology transfer:

"Transfer of knowledge and technology. Within our mission to improve health in the tropics, we will continue to ensure research output transfer to tropical disease endemic areas, by supporting translation of relevant articles into Portuguese; preparing dissemination and policy briefs directed at specific stakeholders (health workers, veterinarians, health policy makers) or wider audiences to elicit relevant interventions. We will continue to strengthen local and regional technical & research expertise and capacity through local PhD and MSc programmes, as well as at IHMT/NOVA, and target PhD student fellowships at Portuguese-speaking African countries."

3.13.3.C. What steps does your organization intend to take in the next one or two years to improve its policy and practice of advocacy and stimulation of an innovation culture?

In the next 1-2 years IHMT/NOVA will follow the aforementioned strategy, including the organization of at least two seminars/workshops on innovation (as mentioned in 3.13.1.C.)

#### **Topic 14. Due Diligence**

#### 3.14.1. Promoting Participation of Women in Science and Innovation

3.14.1.A. Does your organisation assess or have criteria for its own workforce, and for that of its partners, concerning the participation of women in science, at all levels of research? Are there guidelines to act if inequity is found? [In cases where there is an under representation of men, the same applies to dealing with this inequity.]

During the last internal assessment exercise, leading to the annual report, it was found that 62% of IHMT/NOVA's workers are female and 38% are male. IHMT/NOVA does not assess its partners regarding the participation of women in science and innovation. However, IHMT/NOVA recently had a project running on the participation of women in science.

3.14.1.B. If your organisation has SOPs, Policy directives or other written Guidelines that provide instruction or guidance on equal participation of women in science – in your own institutions or in partner institutions, please attach or provide URL. If you do not have such documents, state that here.

There are no written guidelines or recommendations on this topic. IHMT/NOVA always promotes the organization of article writing workshops, with the participation of female scientists form various CPLP countries. More recently, there was a research project on this topic, focused on the establishment of a network of female scientists:

Network for Portuguese speaking women in tropical health sciences. Funded by the Elsevier Foundation, contract number IHMT/NOVA. 1-1-2014 to 31-12-2016

This project aims to improve the career development prospects in tropical health related sciences for women in African Portuguese speaking countries, through the creation of a "Network for Portuguese speaking women in tropical health sciences" (Rede lusófona de mulheres nas ciências da saúde).

This network has as its main goal to support the career development of women scientists in Portuguese speaking countries in Africa (Mozambique, Angola, Cape Verde, Guinea Bissau and St. Tomé and Príncipe) and in Portugal with a particular interest in Tropical Health Sciences.

3.14.1.C. What steps does your organization intend to take in the next one or two years to improve its policy and practice of increasing women's participation in research collaborations?

During the next two years follow-up actions will be put in place to ensure that the previously mentioned network will remain active, resulting in at least three collaborative projects submitted for funding by May 2020.

#### 3.14.2. Negative Environmental Impact

*3.14.2.A.* Does your organisation have explicit policies or practices to ensure that research programmes asses, report and minimize environmental impact?

All projects developed by the Institute must be submitted to the Ethics Council, which evaluates their potential negative impact on humans and nonhumans, being the currently existing device to deal with these issues. Research proposals submitted to funding agencies also usually include a dimension on how to tackle "negative environmental impacts". There was recently an internal debate on the use of insecticides, genetically modified vectors, DDT and antibiotics, with important environmental impacts. These issues usually arise during the preparation of research proposals.

3.14.2.B. If your organisation has SOPs, Policy directives or other written Guidelines that provide instruction or guidance on minimizing environmental impact of research collaborations, please attach or provide URL. If you do not have such documents, state that here.

# The only written recommendations regarding this topic are related to the Ethics Council, as mentioned in Domain 2.

*3.14.2.C.* What steps does your organization intend to take in the next one or two years to improve its policy and practice of reducing environmental impact of research?

The new strategy of GHTM for 2018-2022 is focused on analyzing and tackling the impacts of climate change on human health, and in that sense it is an approach to R&D which illustrates a concern with environmental issues:

"One of the cross-cutting issues of GHTM/IHMT concerns GLOBAL PATHOGEN DISPERSION AND POPULATION MOBILITY, and one of its objectives is to produce risk maps for infectious diseases based on: pathogen, human populations (including gender-based assessments), reservoir (e.g. MosquitoWeb expansion to other vectors), environment, and microbiomes. Due to the effects of climate change, it is expected that various projects will be developed on the topic of environmental health, recognizing the importance of climate change for the proliferation of pathogens and vectors in the world, as tropical infectious diseases have already reached Europe."

By May 2019 IHMT/NOVA's Management Board will develop a policy paper on the environmental impact of IHMT/NOVA's research, in order to provide clear recommendations to researchers who work in fields with potential environmental impact.

# 3.14.3. Achieving SDGs

3.14.3.A. An overarching mechanism to support global development is to make positive contributions to the Sustainable Development Goals (SDGs). Does your organisation have explicit executive policies or strategies to maximize the contributions of its research collaborations towards achieving one or more SDGs?

IHMT/NOVA's research strategy aims to address the Sustainable Development Goals (SDGs), in particular goals 3 (Goal 3: Ensure healthy lives and promote well-being for all at all ages) and 17 (Revitalize the global partnership for sustainable development).

3.14.3.B. If your organisation has SOPs, Policy directives or other written Guidelines that provide instruction or guidance synergizing research collaborations with achievement of SDGs (or other development goals), please attach or provide URL. If you do not have such documents, state that here.

The strategy of IHMT/NOVA's R&D center, GHTM, mentions the sustainable development goals, and its strategy explicitly deals with goals 3 and 17.

GHTM's strategy for 2018-2022 - [ENCLOSED]

3.14.3.C. What steps does your organization intend to take in the next one or two years to improve its policy and practice of aligning your research efforts with organizational support to achieve SDGs?

IHMT/NOVA will follow the program developed for 2018-2022, which is clearly aligned with the previously mentioned SDGs.

# **Topic 15. Expectation of All Partners to Adhere to a Best Practice Standard In Research Collaborations**

# 3.15.1. Partner Requirements for Fair Research Partnerships

3.15.1.A. Does your organisation require its partners to produce RFI Reports on their own organisations, or to make explicit statements about adoption and use of existing codes of research practice? If not, how does your organisation create a culture of fairness in its research collaborations?

At the moment, IHMT/NOVA does not require its partners to produce RFI reports on their organizations, but recently it has submitted a project to the TWINNING-WIDESPREAD call which aims at promoting and expanding the RFI, including its advocacy within the CPLP. In case this project is funded, IHMT/NOVA will be able to promote the RFI in a more efficient and robust manner with its research partners.

3.15.1.B. If your organisation has a SOPs, Policy directives or other written Guidelines that provide instruction or guidance on requirements for corporate behaviour in research collaborations and partnerships, please attach or provide URL. If you do not have such documents, state that here.

IHMT/NOVA's strategy for 2018-2022 includes an explicit reference to the Research Fairness Initiative, and the goals and strategies of GHTM include the field of Fair Research Partnerships [link]:

"FAIR RESEARCH PARTNERSHIPS aims to ensure that North/South partnerships on health research are carried out in a symmetrical way. We integrate IHMT/NOVA's work in the emerging field of "research partnerships", building upon IHMT/NOVA's historical work within the CPLP and benefiting from collaborations with other leading institutions in the field of health research in low and middle-income countries. It builds on two funded projects (Africa Erasmus+; EDCTP). Our aims are to:

- develop innovative research on partnership development and sustainability;

- carry out inter and transdisciplinary teaching and learning, and knowledge management.

- strengthen our partnership and commitment with the Research Fairness Initiative (http://rfi.cohred.org) and expanded it to our network of Public Health Institutes at CPLP (RINSP)."

3.15.1.C. What steps does your organization intend to take in the next one or two years to improve its policy and practice of requiring its partners to produce RFI Reports or make explicit statements on adoption and use of existing guidelines?

During the next two years IHMT/NOVA will expand the advocacy of the RFI within the CPLP. In July 2018, shortly after the publication of IHMT/NOVA's external report, the director will write a memo recommending the advocacy and establishment of collaborations with institutions adopting the RFI. However, IHMT/NOVA will not exclude establishing partnerships with non-adhering institutions.

#### 3.15.2. Sponsor Requirements for Fair Research Partnerships

3.15.2.A. Does your organisation require its sponsors or funders to be RFI subscribers, or to make explicit statements about codes for fairness in funding in research and innovation? If not, how does your organisation ensure or attempt to ensure that research funder or sponsor demands do not create unfairness in partnerships?

The aim of the research proposal recently submitted to the TWINNING-WIDESPREAD call is precisely that, but it is not normative - its goal is an evolution of the institutional culture of partners and funders, generating a greater awareness towards equity and fairness through specific actions and tasks.

3.15.2.B. If your organisation has a SOPs, Policy directives or other written Guidelines that provide instruction or guidance on requirements for research funder or research sponsor behaviour in research collaborations and partnerships, please attach or provide URL. If you do not have such documents, state that here.

The previously mentioned project will develop those issues. Other projects related to equity in partnerships in which IHMT/NOVA is involved include the project on Ethics Committees in the CPLP, funded by EDCTP (see domain 2), and the project University Development and Innovation – Africa (UDI-A), funded by the Erasmus + program (see end of domain 3).

3.15.2.C. What steps does your organization intend to take in the next one or two years to improve its policy and practice of requiring its sponsors and funders to produce RFI Reports or make explicit statements on adoption and use of existing guidelines?

IHMT/NOVA's approach will depend in part on the approval of the FAIR project. IHMT/NOVA was recently informed that FAIR was not approved for funding, but in November 2018 a revised version will be resubmitted. It is expected that FAIR will, in the near future, generate a platform to foster the organization of workshops and various capacity building initiatives to promote and develop the RFI within the CPLP. Even if the project is not approved the IHMT/NOVA is committed to promoting principles of equity in all partnerships it carries out, as elicited by the memo that the Director will write in July 2018.

#### 3.15.3. Fair Research Contracting

3.15.3.A. Does your organisation have a research office that contracts and administers research funds? Does your organisation require that its research leaders, project managers or legal staff have an exposure to mechanisms and resources for fair research contracting57 – through course attendance, talks, web-site visits, or in any other way? How does your organisation engender a culture of 'fairness' in the contracts it negotiates and concludes?

IHMT/NOVA has a Project Management Office, a financial department and a human resources department, in charge of aspects related to hiring staff and managing research funds. The project FAIR, currently under evaluation, contemplates exposing administrative staff to RFI's principles and approaches.

As previously mentioned, contracts are prepared under the rules and regulations of funding agencies which support IHMT/NOVA's research, as the institution has no access to autonomous funding to carry out R&D. IHMT/NOVA's equity culture is deeply entangled with its strategic vision (clarified in its strategy for 2018-2022) and its historical background, as previously mentioned.

3.15.3.B. If your organisation has a SOPs, Policy directives or other written Guidelines that provide instruction or guidance on requirements for research management staff to be trained and updated on 'fair research contracting', please attach or provide URL. If you do not have such documents, state that here.

At the moment there are no SOPs or written guidelines on these issues; following the project FAIR it is expected that several actions related to this field will take place.

3.15.3.C. What steps does your organization intend to take in the next one or two years to improve its policy and practice of requiring research management staff to be trained and remain updated on best practices in fair research contracting?

The implementation of Fair Research Partnerships is an overarching theme which guides IHMT/NOVA's research agenda. In case the project FAIR is approved, there will be available funding to organize several activities which include IHMT/NOVA's administrative staff as well as participant institutions in training and capacity building initiatives on the topic of research fairness. Since the project was not initially approved, IHMT/NOVA will nevertheless prepare an internal memorandum in July 2018 (see 3.15.1.C.) which will also mention literature on some of the best practices regarding fair research contracting.

#### Other Aspects of "Fair Sharing of Benefits, Costs and Outcomes"

In selecting 5 topics and 15 indicators of 'Fair sharing of benefits, costs and outcomes", the RFI is inevitably over-simplifying in the pursuit of optimizing its cost-effectiveness. Your organisation may well make other contributions to improving fairness in sharing the costs, benefits and outcomes of research. Please describe any actions, current or past, that reflect your intent and impact in this area. This can be in the form of case-studies, actual examples, reports or third-party comments concerning such efforts. Attach documents here / provide URLs to any materials, case studies, examples, reports etc that you want to share to illustrate other actions your organisation is providing or requiring as part of increasing 'fairness of opportunity'.

#### **Example 1**

Proposal Title: Enhancing fairness in 'research partnerships' in tropical infectious diseases research (FAIR)

Call Identifier H2020-WIDESPREAD-2016-2017

The aim of this proposal is to allow IHMT/NOVA to become a leading Research Centre in the emerging field of 'research partnerships', building upon IHMT/NOVA's historical work within the Community of Portuguese Speaking Countries (CPLP) and benefiting from partnerships with two leading institutions in the field of health research in Low and Medium Income Countries (LMICs)– the Council on Health Research for Development (COHRED) and the University of Southern Denmark (SDU), as well as collaborations with research institutions in Mozambique (Fundação Manhiça), Guinea-Bissau (Projecto de Saúde Bandim), Brazil (Instituto de Ciências Biomédicas da Universidade de São Paulo) and Denmark (Statens Serum Institut).

This proposal stems from the recently developed Research Fairness Initiative (RFI), created by COHRED to ensure that North/South partnerships in the field of global health research are carried out in a symmetrical way, instead of mainly benefiting high income

countries. Peter Aaby's leading work on the non-specific effects of vaccines is as an example of RFI in practice.

This proposal is focused on the development of an innovative research program; highcaliber interdisciplinary teaching/ learning and knowledge management. This project will involve an array of methodological options such as the development of research and publication agendas; researchers mobility and internships; research proposal writing retreats; RFI report and research paper writing workshops; monitoring RFI awareness in existing partnerships; Media training.

This proposal will lead the creation of a new research line on research partnerships at the IHMT/NOVA; result in the establishment of an RFI culture from project to Board level at the IHMT/NOVA, at partner institutions and at member institutions of existing networks; result in the strengthening of a robust ethical research partnership culture in tropical infectious diseases; enhance the scope and quality of IHMT/NOVA's postgraduate programs.

#### Example 2

#### ANAIS DO IHMT - Vol. 16 de 2017 - Suplemento 2

Special Issue - Equidade na Investigação em Saúde para o Desenvolvimento (Equity in Health Research for Development)

Editorial

S05 - Cooperação, investigação e equidade em Saúde

Cooperation, investigation and health equity

Paulo Ferrinho and Paula Fortunato

Invited Editorial

S07 - Para além das boas intenções - A Iniciativa para a Equidade na Investigação

Beyond Good Intentions - the Research Fairness Initiative

Carel IJsselmuiden and Kirsty Klipp

**Original Articles** 

S11 - A implementação da Iniciativa para a Equidade na Investigação

The Implementation of the Research Fairness Initiative

António Carvalho, Carel IJsselmuiden, Kirsty Klipp, Paulo Ferrinho and Zulmira Hartz

S21 - Produção de conhecimentos, ação política e equidade: contribuições do Observatório de Análise Política em Saúde (OAPS)

Knowledge production, political action and equity: observatory of political analysis in health (OAPS) contributions

Maria Guadalupe Medina and Jairnilson Silva Paim

S31 - A equidade na investigação avaliativa com foco na cooperação em Saúde para o desenvolvimento

Equity in evaluative research focusing on health cooperation and development

Isabel Craveiro and Zulmira Hartz

S39 - Boas práticas de equidade em investigação em Saúde Pública: exemplos do Brasil e Portugal

Best practices of Public Health research equity: examples from Brazil and Portugal

Luís V. Lapão and Ricardo Arcêncio

S47 - A gestão do conhecimento no contexto de uma emergência em Saúde Pública: o caso da síndrome congénita do Zika vírus, em Pernambuco, Brasil

The knowledge management in the context of a public health emergency: the case of Zika virus congenital syndrome in Pernambuco, Brazil

Luciana Caroline Albuquerque Bezerra, Eronildo Felisberto, Juliana Martins Barbosa da Costa, Marcella de Brito Abath and Zulmira Hartz

S57 - Equidade e governança: análise da política de pesquisa e inovação em Saúde no Brasil
Equity and governance: analysis of health research and innovation policy in Brazil
Antonia Angulo-Tuesta and Zulmira Hartz

S65 - Implementação de um sistema de monitoramento e avaliação de âmbito federal: o caso do e-Car no Departamento de Monitoramento e Avaliação do Sistema Único de Saúde (SUS) –
Sistema de monitoramento e avaliação para o SUS

Implementation of a monitoring and evaluation system at the federal level: the e-Car case in the Department of Monitoring and Evaluation of the Integrated Health System (SUS) Monitoring and evaluation system for the Integrated Health System (SUS)

Ana Claudia Figueiró, Maria Aparecida dos Santos, Marly Marques da Cruz, Juliana Ubarana and Zulmira Hartz

S75 - Avaliação dos estágios de curta duração para profissionais de Saúde dos PALOP e Timor-Leste promovidos pela Fundação Calouste Gulbenkian em Portugal, entre 2011 e 2016

Evaluation of the short term internships for health professionals from Portuguese Speaking African Countries and East Timor, promoted by the Fundação Calouste Gulbenkian in Portugal, between 2011 and 2016

Ana Cristina Garcia, Sónia Dias, Daniela Alves, João de Almeida Pedro, Maria Hermínia Cabral and Zulmira Hartz S85 - Da avaliação de projetos de fortalecimento de capacidades às políticas e práticas em Saúde: um estudo de caso em Moçambique

From the evaluation of capacity strengthening projects to health policies and practices: a case study in Mozambique

Mie Okamura, Sónia Dias and Zulmira Hartz

#### **Review Article**

S93 - Saúde para o desenvolvimento, parcerias de investigação e equidade: uma revisão de literatura

Health for development, research partnerships and fairness: a literature review

António Carvalho, João Arriscado Nunes e Zulmira Hartz

#### Research Notes

S105 - Fortalecimento dos Comités de Bioética nos Países Africanos de Língua Portuguesa

Strengthening Bioethics Committees from Portuguese Speaking African Countries

João Schwalbach, Esperança Sevene, Ema Cândida Branco Fernandes, Isabel Inês Monteiro de Pina Araújo, Helena Pereira de Melo, Amilcar Bernardo Tomé da Silva, Emanuel Catumbela, Jahit Sacarlal, Jorge Seixas, Maria Chimpolo, Rassul Nala, Tazi Nimi Maria, Zulmira Hartz e Maria do Rosário Oliveira Martins

S109 - Parcerias colaborativas e inovadoras na gestão do conhecimento para o desenvolvimento sustentável, no âmbito da Iniciativa para a Equidade na Investigação: o Projeto MedTROP - IHMT/FIOCRUZ

Collaborative and innovative partnerships in knowledge management for sustainable development in the context of Research Fairness Initiative (RFI): The MedTROP Project - IHMT/FIOCRUZ

Paula C. Sousa Saraiva, André Pereira Neto e Zulmira Hartz

S113 - Microbioma respiratório saudável: um projeto inovador na primeira coorte de nascimento em Angola

Healthy respiratory microbiome: an innovative project within the frst birth cohort in Angola

Miguel Lanaspa e Márcia Melo Medeiros

# Example 3

The promotion the RFI within the CPLP, leading to a resolution recommending the adoption of the RFI.

"IV MEETING OF MINISTERS OF HEALTH

# OF THE COMMUNITY OF THE PORTUGUESE LANGUAGE COUNTRIES

Brasília, October 26, 2017

Resolution on the adoption of the principles of the Research Fairness Initiative

The Ministers of Health of the Community of Portuguese Language Countries (CPLP) or their representatives, meeting in Brasilia on October 26, 2017, on the occasion of its Fourth Regular Meeting;

Recognizing that, in order to achieve the Sustainable Development Goals (SDGs), partnerships must be equitable, with appropriate benefits for all countries, including through North-South, South-South, triangular and multilateral cooperation;

Considering that the Research Fairness Initiative (RFI), as proposed by the Council on Health Research for Development (COHRED), is aimed at creating a mechanism to create transparency, enabling global learning about what really works and promoting the adoption of best scientific and investigation practices;

Recognizing that the CPLP is a fundamental institution to support the adoption of the RFI principles and mechanisms as key tools in research and science collaborations of its Member States;

DECIDE:

1. To recommend that the guiding principles and mechanisms of the RFI be built into the scientific work of the RINSP and RIDES.

Passed in Brasília on October 26, 2017."

http://rfi.cohred.org/3820/community-of-portuguese-language-countries-cplp-approvesdeclaration-to-adopt-the-rfi/

### Example 4

Translation of the three main RFI guides, as well as the brochure, into Portuguese.

### Example 5

Research Project UDI Africa - University Development and Innovation

About the project

The UDI-A project wants to empower HEI from partner countries to play an effective impacting role in fostering sustainable and inclusive development in their region and country. African partners will play this role by helping their students to connect with local economic activity and

local social processes in a way that these students will either create new value chains or help to enhance the existing ones.

UDI-A project aims to enhance the quality of teaching and research at four African universities (in Angola and Mozambique) in selected areas, where there is a lack of qualified teachers and a high demand for graduates. In both countries, the project counts one big established university in the capital city and one smaller institution in a province.

Each of the African universities will work in pairs with one European partner (TWIN). Academic staff at the African institutions will be trained both in terms of scientific content and teaching methodologies. Administrative staff will be trained in international affairs, student placement and entrepreneurship. The Consortium will organise collective training activities with an emphasis on soft skills development, social innovation and entrepreneurship.

Each African partner will select 16 academics and 4 administrators (CHAMPIONS and JUNIORS) to take part in the training and other project activities. As from the 4th and final semester the activities will be open to other staff members and students as well.

The two year project will result in  $4 \times 20$  staff members, internationally networked and trained to provide state-of-the-art higher education and services in their respective areas.

In parallel to the training, these teams will build or renew at each of the four African institutions a 'Centre for Academic Development and Innovation' (CADIs). The CADIs will provide the infrastructure and framework conditions to help promote and ensure continued networking and training for more cohorts of staff beyond the project lifetime.

### Example 6

The HAITool project is a great example of knowledge translation, illustrating IHMT/NOVA's research societal impact.

HAITool – A Toolkit to Prevent, Manage and Control Healthcare Associated Infections in Portugal

Healthcare-associated infections (HAIs) are a major cause of morbidity and mortality (37,000 deaths / year in Europe) and have an important economic impact (28.4 to 33.8 billion dollars / year in the USA). Antibiotics are important in the control of HAIs, however, they are often prescribed inappropriately leading to the selection of resistant microorganisms that increase morbidity, mortality and costs.

Prevention and education are key strategies for the control of HAIs. Several measures have been described on it: hand hygiene, use of communication tools, policies for the diagnosis and therapy of resistant microorganisms, implementation of surveillance systems to antibiotics.

Antimicrobial stewardship programs are interventions designed to improve use of antimicrobials. Antimicrobial stewardship programs reduce hospital rates of antibiotic resistant HAIs and save hospitals and tax-payers money. Supported by this evidence, Antimicrobial stewardship programs have been implemented around the world.

In Portugal, despite the existence of an Infections Prevention and Control and Antimicrobial Resistance Program (http://www.dgs.pt/programas-de-saude-prioritarios.aspx), rates of HAIs, antimicrobial use and antimicrobial resistance rates are still high compared to other European countries: 10.6% versus 5.7% and 45.4% vs 35.8%, leading to resistance rates that can reaching 84.5%.

It has been described that effective prevention and control strategies are those that are well-matched with the social, educational and cultural background. Hence, we consider that a national toolkit designed to optimize the use of antimicrobial therapy adapted to the socio-cultural context is needed.

Based on that (and in the main objective of the Infections Prevention and Control and Antimicrobial Resistance Program from DGS that is to reduce, prevent and control HAIs, by implementing evidence based practices), we developed the HAITool project. The main objective of HAITool project that is to design a toolkit (as an operational framework) to support the health professional to improve the prevention and treatment of HAI and antimicrobial resistance. The toolkit will include the combination of a set of guidelines to implement Antibiotic Stewardship Programs and the support of ARTEMIS, an information systems to help on decision-making. We expect to give an important contribution to effectively decrease the high rates of antibiotic usage and misuse, as well as antibiotic resistance associated with HAIs in Portugal and to promote the implementation of a nationwide Antibiotic Stewardship Program as a complement of the national program for HAIs control.

### Summary table for Domain 3 : Fair sharing of Benefits, Costs and Outcomes

The table below indicates the actions to be taken in the short term regarding specific indicators. Priority levels are from 1 (very important in the short term) to 3 (less important in the short term).

Indicator number	Priority Level	Actions to be taken	Due date
Topic 11 : Research system capacities			
3.11.1.	Medium	IHMT/NOVA's board will develop a memorandum stating that all collaborative research projects coordinated by IHMT/NOVA's researchers and involving partnerships with LMIC's will have to include some kind of capacity building component	February 2020
3.11.2.	Medium	An internal meeting will take place in June 2019 to develop a position paper (to be ready in July 2019) on how to support countries to develop their research agenda An internal memorandum will be circulated to recommend that all collaborative projects with LMICs incorporate some kind of capacity building component	July 2019 February 2019
3.11.3.		Not applicable	
Topic 12 : Intellectual property rights an	d technology transfer	l .	
3.12.1.		Not applicable	
3.12.2.	Medium	In March 2019 IHMT/NOVA will conduct an internal assessment of its policy and practice of sharing IPR with partners, with the aim of	June 2019

Indicator number	Priority Level	Actions to be taken	Due date
		developing clear guidelines on these	
		topics. These guidelines will be	
		included in the general regulation on	
		data ownership (June 2019)	
3.12.3.		Not applicable	
Topic 13 : Innovation system capacities		•	
3.13.1.	Medium	IHMT/NOVA will organize at least	Until May 2020
		two seminars/workshops on capacity	
		building in the field of innovation	
3.13.2.		Not applicable	
3.13.3.		Not applicable	
Topic 14 : Due diligence			•
3.14.1.	Low	Follow-up actions will be put in place	Until May 2020
		to ensure that the network of female	
		scientists will remain active, resulting	
		in at least three collaborative projects	
		submitted for funding	
3.14.2.	High	IHMT/NOVA's Management Board	May 2019
	-	will develop a policy paper on the	
		environmental impact of	
		IHMT/NOVA's research	
3.14.3.		Not applicable	
Topic 15 : Expectation of all partners to	adhere to a best practice standard	in research collaborations	1
3.15.1.	High	IHMT/NOVA's director will write a	July 2018
	č	memo recommending the advocacy	-
		and establishment of collaborations	
		with institutions adopting the RFI	
3.15.2.		Not applicable	
3.15.3.		Not applicable	

### **Overall Summary table for actions to be taken**

Domain	Indicator number	Priority Level	Actions to be taken	Due date	
	Topic 1 : Relev	vance to comm	unities – in which research is done		
	1.1.1. High		Transparent and annual assessment of key research priorities with its main partners	March 2019	
			Overall plan ready for actioning	October 2019	
	1.1.2.	Medium	Internal meeting on how to support countries to develop their research agendas	June 2019	
			Position paper on how to support countries to develop their research agendas	July 2019	
	1.1.3.		Not applicable		
	Topic 2 : Early engagement of all partners – in deciding about aims, methods, implementation				
	1.2.1.	Medium	Internal assessment of existing partnerships, memoranda of understanding and protocols	December 2018	
			Policy paper laying out IHMT/NOVA's institutional policy on research for development	June 2019	
	1.2.2.	High	Meeting to identify focal points for CPLP countries	October 2019	
			Focal points are publicly available on IHMT/NOVA's website	December 2019	
Domain 1 :	1.2.3.	Medium	Meeting with selected Members of the Portuguese Parliament and representatives of the Ministry of Health and Foreign Affairs to prepare a memorandum on global health policy	October 2019	
			Organization of academic meeting in Portugal on effective development focused on global health	Around May 2020	
Fairness of Opportunity	Topic 3 : Making contributions of all partners explicit – fair research contracting				
	1.3.1.	High	From June 2019 onward all relevant projects coordinated by the IHMT/NOVA must result in at least one policy paper	June 2019	
			Memo with clear recommendations on science communication and public engagement with science	January 2020	

Domain	Indicator number	Priority Level	Actions to be taken	Due date		
	1.3.2.		Not applicable			
	1.3.3.	High	From June 2019 onwards, all relevant projects coordinated by the IHMT/NOVA must result in at least one policy paper	June 2019		
	Topic 4 : Ensuring that matching and other co-financing mechanisms do not undermine opportunities for fair participation of all partners.         1.4.1.       Not applicable					
	1.4.2.		Not applicable			
	1.4.3.		Not applicable			
	Topic 5 : Recognition of unequal research management capacities between partners and providing for appropriate corrective measurement					
	1.5.1.	Medium	Memorandum laying out IHMT/NOVA's policy on supportive actions.	November 2019		
	1.5.2.		Not applicable			
	1.5.3.		Not applicable			
	Topic 6 : Minimizing negative impacts of research programmes on health and other systems					
	2.6.1.	Low	IHMT/NOVA's Scientific Advisory Board will carry out an internal assessment to decide if further actions are required on impact assessment of research collaborations	May 2020		
	2.6.2.		Not applicable			
	2.6.3.		Not applicable			
	Topic 7 : Fair local hiring, training and sourcing					
	2.7.1.		Not applicable			
Domoin 2.	2.7.2.		Not applicable			
Domain 2 : Fair Process	2.7.3.		Not applicable			
	Topic 8 : Respect for authority of local ethics review systems					

Domain	Indicator number	Priority Level	Actions to be taken	Due date		
	2.8.1.	Medium	IHMT/NOVA's Ethics Council will assess whether shared SOPs for Ethics Committees are already in place, and if any further actions are necessary to foster their implementation	May 2020		
	2.8.2.	Medium	IHMT/NOVA's Ethics Council will assess whether the EDCTP project led to the reinforcement of African Ethics Committees and if shared SOPs are already in place	May 2020		
	2.8.3.	Medium	To submit at least 2 research proposals dealing with capacity building in the field of ethics expertise	By May 2020		
	Topic 9 : Data ownership storage, access and use					
	2.9.1.	High	IHMT/NOVA will develop SOPs related to ownership and sharing of material and virtual data, as part of its general regulation for data ownership	June 2019		
	2.9.2.	High	Development of general regulation on data ownership	June 2019		
	2.9.3.	Medium	GHTM's Scientific Commission will meet in order to develop an internal memorandum on IHMT/NOVA's policy and practice on publications agreements	December 2018		
			At least one seminar/workshop on open science will be organized	Until May 2020		
	Topic 10 : Encourage full cost recovery budgeting and compensation for all partners					
	2.10.1.		Not applicable			
	2.10.2.	Medium	IHMT/NOVA will be involved in at least 2 capacity building activities focused on research budgeting with CPLP partners	Until May 2020		
			An internal memorandum will be circulated to recommend that all collaborative projects with LMICs incorporate some kind of capacity building component	February 2019		
	2.10.3.		Not Applicable			
	Topic 11 : Research system capacities					
	3.11.1.	Medium	IHMT/NOVA's board will develop a memorandum stating that all collaborative research projects coordinated by IHMT/NOVA's researchers and involving partnerships with LMICs' will have to include some kind of capacity building component	February 2020		

Domain	Indicator number	Priority Level	Actions to be taken	Due date		
	3.11.2.	Medium	An internal meeting will take place in June 2019 to develop a position paper (to be ready in July 2019) on how to support countries to develop their research agenda	July 2019		
	3.11.3.	Medium	Not applicable			
	Topic 12 : Intel	llectual propert	y rights and technology transfer			
Domain 3 : Fair sharing of benefits, costs and outcomes	3.12.1.		Not applicable			
	3.12.2.	Medium	In March 2019 IHMT/NOVA will conduct an internal assessment of its policy and practice of sharing IPR with partners, with the aim of developing clear guidelines on these topics. These guidelines will be included in the general regulation on data ownership (June 2019)	June 2019		
	3.12.3.		Not applicable			
	Topic 13 : Inno	vation system	capacities			
	3.13.1.	Medium	IHMT/NOVA will organize at least two seminars/workshops on capacity building in the field of innovation	Until May 2020		
	3.13.2.		Not applicable			
	3.13.3.		Not applicable			
	Topic 14 : Due diligence					
	3.14.1.	Low	Follow-up actions will be put in place to ensure that the network of female scientists will remain active, resulting in at least three collaborative projects submitted for funding	Until May 2020		
	3.14.2.	High	IHMT/NOVA's Management Board will develop a policy paper on the environmental impact of IHMT/NOVA's research	May 2019		
	3.14.3.		Not applicable			
	Topic 15 : Expectation of all partners to adhere to a best practice standard in research collaborations					
	3.15.1.	High	IHMT/NOVA's director will write a memo recommending the advocacy and establishment of collaborations with institutions adopting the RFI	July 2018		
	3.15.2.		Not applicable			
	3.15.3.		Not applicable			

# **Appendix A – Full listing of RFI Domains, Topics and Indicators**

[Optional]

### **RFI DOMAIN 1: FAIRNESS OF OPPORTUNITY**

### TOPIC 1. RELEVANCE TO COMMUNITIES - in which research is done

- 1.1.1. Research priorities in communities where research is being conducted.
- 1.1.2. Actions if there are no research priorities.
- 1.1.3. Justification to research low priority topics.

### TOPIC 2. EARLY ENGAGEMENT OF PARTNERS

- 1.2.1. Relationship between the 'main/lead/sponsoring' and 'other' partners.
- 1.2.2. SOPs for partner inclusion in study design.
- 1.2.3. SOPs for supportive actions to partners.

### TOPIC 3. MAKING CONTRIBUTIONS OF ALL PARTNERS EXPLICIT - Fair Research Contracting

- 1.3.1. Role clarification in research partnerships.
- 1.3.2. SOPs for conflict resolution.
- 1.3.3. Making potential impact explicit *before* starting research.

### TOPIC 4. ENSURING THAT MATCHING AND OTHER CO-FINANCING MECHANISMS DO NOT

### UNDERMINE OPPORTUNITIES FOR FAIR PARTICIPATION OF ALL PARTNERS

- 1.4.1. Equal co-financing.
- 1.4.2. Alternatives to equal co-financing.
- 1.4.3. Research outside national priorities and co-financing.

# TOPIC 5. RECOGNITION OF UNEQUAL RESEARCH MANAGEMENT CAPACITIES BETWEEN PARTNERS AND PROVIDING FOR APPROPRIATE CORRECTIVE MEASURES

- 1.5.1. Research Management Capacity.
- 1.5.2. Financial Management Capacity.
- 1.5.3. Contracting and Contract Negotiation capacity.

### **DOMAIN 2. FAIR PROCESS**

### TOPIC 6. MINIMIZING NEGATIVE IMPACT OF RESEARCH PROGRAMMES ON HEALTH AND

### OTHER SYSTEMS

- 2.6.1. Assessing potential harm of research.
- 2.6.2. Reducing negative impact of research.
- 2.6.3. Compensation for unintended (negative) consequences of research.

### TOPIC 7. FAIR LOCAL HIRING, TRAINING AND SOURCING

- 2.7.1. Local staffing.
- 2.7.2. Local sourcing of consumables and services.
- 2.7.3. Support for local capacity development.

### TOPIC 8. RESPECT FOR AUTHORITY OF LOCAL ETHICS REVIEW SYSTEMS

- 2.8.1. Research Ethics Approval.
- 2.8.2. Supporting local Research Ethics Review capacity.
- 2.8.3. Enabling access to global expertise.

#### TOPIC 9. DATA OWNERSHIP, STORAGE, ACCESS AND USE

- 2.9.1. Data Ownership Agreements.
- 2.9.2. Material Transfer Agreements.
- 2.9.3. Rights of Use of Data for Publication.

# TOPIC 10. ENCOURAGE *FULL COST RECOVERY* BUDGETING AND COMPENSATION FOR ALL PARTNERS

- 2.10.1. Full Cost Recovery Budgeting.
- 2.10.2. Improving/Standardizing Budgeting.
- 2.10.3. External Financial Audit.

### DOMAIN 3. FAIR SHARING OF BENEFITS, COSTS AND OUTCOMES

### TOPIC 11. RESEARCH SYSTEM CAPACITIES

- 3.11.1. Training.
- 3.11.1. Research Management.
- 3.11.1. Increase (Predictable) Funding.

### TOPIC 12. INTELLECTUAL PROPERTY RIGHTS AND TECH TRANSFER

- 3.12.1. Technology Transfer.
- 3.12.2. Sharing Intellectual Property Rights.
- 3.12.3. Contracting Support for IPR.

### TOPIC 13. INNOVATION SYSTEM CAPACITIES

- 3.13.1. Localizing innovation.
- 3.13.2. Financing to link Research with Innovation.
- 3.13.3. Support Innovation Culture.

#### **TOPIC 14. DUE DILIGENCE**

- 3.14.1. Promoting participation of women in science and innovation.
- 3.14.2. Negative environmental impact.
- 3.14.3. Achieving SDGs.

# TOPIC 15. EXPECTATION OF ALL PARTNERS TO ADHERE TO A BEST PRACTICE STANDARD IN RESEARCH COLLABORATIONS

- 3.15.1. Partner Requirements for Fair Research Partnerships.
- 3.15.2. Sponsor Requirements for Fair Research Partnerships.
- 3.15.3. Fair Research Contracting.