

Evaluation Panel: THEMATIC AREAS - Mediterranean Studies: Agro-food Systems, Water and Energy Resources, Cultural Heritage, and Tourism, Hospitality and Hotel Management

Panel Members

Thomas Bierschenk (Co-Chair)	Johannes Gutenberg Universität Mainz, Germany
Adele Ladkin (Co-chair)	Bournemouth University, United Kingdom
Christopher Cooper	University of Leeds, United Kingdom
Heath Cabot	University of Pittsburgh, United States of America
Maja Turnšek	University of Moribor, Slovenia
Marc Benoît	INRA - Institut National de la Recherche Agronomique, France
Pierre-Yves Le Meur	Université Montpellier 3, France

R&D Units

Centro de Estudos Africanos da Universidade do Porto (CEAUP)	Centro de Estudos Africanos da Universidade do Porto (CEAUP)
Centro de Investigação de Montanha (CIMO)	Instituto Politécnico de Bragança (IPBragança)
Centro de Investigação, Desenvolvimento e Inovação em Turismo (CITUR)	Instituto Politécnico de Leiria (IPLeiria)
Centro de Investigação em Património, Educação e Cultura (CIPEC)	Instituto Politécnico de Castelo Branco (IPCB)
Centro de Investigação em Turismo, Sustentabilidade e Bem-estar (CinTurs)	Universidade do Algarve (UAAlg)
Centro de Tecnologia, Restauro e Valorização das Artes (TECH&ART)	Instituto Politécnico de Tomar (IPT)
Instituto Mediterrâneo para a Agricultura, Ambiente e Desenvolvimento (MED)	Universidade de Évora (UE)
Laboratório HERCULES - Herança Cultural, Estudos e Salvaguarda (HERCULES)	Universidade de Évora (UE)
Unidade de Investigação Aplicada em Gestão (UNIAG)	Instituto Politécnico de Bragança (IPBragança)

Evaluation Panel: **THEMATIC AREAS - Mediterranean Studies: Agro-food Systems, Water and Energy Resources, Cultural Heritage, and Tourism, Hospitality and Hotel Management**

R&D Unit: Centro de Estudos Africanos da Universidade do Porto (CEAUP)

Coordinator: Ana Maria da Rocha de Sousa Guedes Alves

Integrated PhD Researchers: 11

Overall Quality Grade: GOOD

Evaluation Criteria Ratings

- (A) Quality, merit, relevance and internationalization of the R&D activities of the Integrated Researchers in the R&D Unit Application: 4
- (B) Merit of the team of Integrated Researchers: 3
- (C) Appropriateness of objectives, strategy, plan of activities and organization: 2

Base Funding for (2020-2023): 89 K€

Recommended Programmatic Support

Programmatic Funding: 80 K€.

Justification, Comments and Recommendations

The CEAUP is a relatively small team (11 Integrated Researchers with PhD; in addition, there are 32 collaborator-researchers and some of them in African countries whose role, however, is less clear). In this respect, the breadth of its thematic fields and research activities is quite large: labor history, slave trade, colonial administration, archeology (with a focus on Angola), education, and cinema. CEAUP multidisciplinary dimension is also noteworthy – history, archeology, political science, anthropology, geography – including the potentially fruitful inclusion of humanities and arts.

CEAUP records in terms of publications are good and the Center publishes a journal, *Africana Studies* (26 issues since 1998) and an online-journal on education, *Sinergia*. Yet most of the publications are in Portuguese and the series edited by Peter Lang Ed (CEAUP Studies on Africa) is not currently very active (two volumes in 2010 and 2012, and no publication since then). There is therefore a deficit in terms of international visibility (if one equates this with publishing in English).

Against the backdrop of the well-established strength of the Center (labor history including slavery, colonial fiscal policy, colonial geography, and the history of knowledge production in Lusophone Africa), the study of trade unionism has become a research focus since 2016 through a specific Observatory of African Trade Unions. CEAUP also organized an international conference on Labor and Trade Unions in Africa in 2017 with International Labor Organization support. It could be interesting to have an insight into how the issue of trade unionism is problematized, for instance in relation to changing work conditions in a neoliberal context and/or specific activities (mining sector for instance).

In addition to this research line, the field of education now emerges in its relations with development aid and global citizenship. This line is promising, combining scientific and applied research issues (with the development of the Synergies network) and tackling topical issues, particularly the linkages between education and policy transfers/development cooperation, as well as its relations with conflict and peace-building.

The third thematic component, “scale, environment and society” is very broad with no clear and specific focus or research question evident. It encompasses independent research clusters on mapping, GIS and geo-spatial information, heritage conservation and archeology in Africa, farming systems and flora inventory, as well as “regions of Africa” as resulting from the interplay of power, landscape, space and place (and including an interesting cluster dedicated to Portuguese tropical geography), plus research on political parties and elections, foreign policies in Africa, cinema and literature. The focus on landscape in the longue durée and its current transformations is promising, especially if related to issues of power relations, territorializing processes and changing senses of place. However, the list of projects, topics and clusters of this research line lacks internal consistency and problematization to be convincing as a structured workgroup.

To summarize this heterogeneous set of undertakings, one can distinguish two main poles of activities. One pole focuses on archives, collection, preservation and the critical production of primary sources via critical editions. However, the proposed projects concentrate on the collection and dissemination of primary data without a clear structuring research

problematic. The second pole is action research-oriented and engaged scholarship interfacing with different publics. Both are interesting and useful from a research and policy viewpoint and would deserve to be developed, but the overall scheme lacks an integrative perspective. The labor issue could help bridge the gap between both poles as it entails an interest for both dimensions (for data collection and archive through the project of observatory and in terms of action/applied research in relation to education).

As regards the lack of integrative perspective, the site visit unfortunately reinforced this impression. The Centre did not present itself as a coherent team but rather as a collection of individuals and individual projects. The head of the Centre could not attend the meeting but her CV does not display clear connections with African studies and no mention was made of her role in the governance or research activities of the Centre. The colleagues only presented their own fields of research without developing a common vision of what the Centre was doing overall and will do for the future. Parts of the programme were not presented (film/literature) and the relevant researchers were not present, nor were the collaborative researchers.

Furthermore, and related to this lack of a consistent and clear vision, the leadership and governance structure remains unclear. The role of the external advisory board is not made explicit, and the governance structure should better represent the different research poles and give a place to the promising younger generation of scholars active in the Centre. Moreover, CEAUP double status as a research institution and a NGO created in 2009 was difficult to ascertain and was insufficiently substantiated despite considerable discussion devoted to it. It did not become clear what the NGO role in the governance structure is, whether it is just a legitimating tool for accessing funding sources targeting associations, and to what extent the existence of this NGO influences or strengthens the applied dimension of CEAUP activities and its action research orientation. It would be useful for CEUAP to elucidate how the articulation between CEAUP NGO and public status is conceptualized and put in practice, in terms of research orientations, partnership, funding, etc.

CEAUP positioning within the African studies landscape in Portugal and Europe is a major issue, all the more as it is the only Portuguese Centre labelled as such. CEAUP could have the ambition to be the intellectual hub of African studies in Portugal, which would require active cooperation efforts in the direction of the university and other Africa-related research activities in the country. It would also imply a systematic national and international strategy of collaboration and networking, in particular via African and European partners, which seems to be lacking in the Centre current and future plans.

CEAUP is a potential interface between African studies at University of Porto, in Portugal, in (mainly Lusophone) Africa, and African studies in Europe and the Lusophone world, in particular Brazil. The Panel recommends funding under the explicit condition that the Centre makes a concerted effort in this direction, based on a coherent and clear strategy to be developed in the near future. Initiatives such as a seminar series with participation from the outside as well as the widening of the reach of the CEAUP, as well as efforts for publishing in English should be encouraged.

The Programmatic Funding as well as the core funding should exclusively be devoted to developing CEAUP as the Portuguese hub of African Studies (see argues in the last paragraph of this section). This money should only be used for: (i) participating in international networks, e.g. AEGIS; (ii) invitation of temporary visiting foreign researchers (including African researchers) Porto; (iii) conference organization; (iv) running a internationally visible seminar series. Funding, including core funding, should explicitly not be used for: fieldwork missions or research missions to archives; journal edition or other publications; data collection (e.g. the Observatory); book purchases; documentary film production. Also, CEAUP urgently needs to develop a team strategy for mobilizing third-party funding from different sources, including European ones. The composition of the Advisory board needs to be based on such strategic considerations.

Further, as regards the *Africana Studia* journal, a strategy for more cost-effective publications and greater international reach in the review and publication process should be devised. *Africana Studia* journal has a history as a solid publication in the field. However, its limited availability as a print journal, as well as its clear position within networks internal to CEAUP, restricts its impact. While the review committee is cognizant of the difficulties posed by contractual obligations, some moves toward Open Access or web-based publishing would ensure that Africa-based scholars would be able to read the journal. Further, the small Editorial Board (at least as listed on the website) has multiple members affiliated with CEAUP, thus ensuring a notable overrepresentation of CEAUP members in a journal that is itself housed at CEAUP. Irrespective of the journal actual practices, for prospective authors and readers, this might raise questions with regard to the reach and transparency in the review process. As such, it remains unclear the extent to which the journal aims to achieve international reach versus serving as a publishing arm of the Centre. Diversifying the editorial board (via more diverse institutional representatives, and internationally) and the scientific board would go some ways to addressing these concerns. Further, the relationship to the other Portuguese African Studies journal (*Quadernos*) needs to be clarified; at first glance it is not obvious that Portugal needs two journals in this field.

Evaluation Panel: THEMATIC AREAS - Mediterranean Studies: Agro-food Systems, Water and Energy Resources, Cultural Heritage, and Tourism, Hospitality and Hotel Management

R&D Unit: Centro de Investigação de Montanha (CIMO)

Coordinator: Isabel Cristina Fernandes Rodrigues Ferreira

Integrated PhD Researchers: 77

Overall Quality Grade: EXCELLENT

Evaluation Criteria Ratings

- (A) Quality, merit, relevance and internationalization of the R&D activities of the Integrated Researchers in the R&D Unit Application: 5
- (B) Merit of the team of Integrated Researchers: 5
- (C) Appropriateness of objectives, strategy, plan of activities and organization: 5

Base Funding for (2020-2023): 1392 K€

Recommended Programmatic Support

PhD Fellowships: 10

Programmatic Funding: 510 K€, including for 2 (1 Junior, 1 Auxiliar) New PhD Researcher Contract.

Justification, Comments and Recommendations

CIMO is a large interdisciplinary (77 integrated postdoctoral members) Unit combining natural, social and engineering sciences in the field of Mediterranean mountain research. The Center is well organized in two research groups on “socio-ecological systems” and “sustainable processes and products” with two sub-topics for each, respectively socio-ecological resilience/sustainable agriculture and innovative agro-food chains and processes and products engineering/natural and bio-based ingredients. The main idea of CIMO of transforming “nature” into high-value products holds large potential for the future in terms of applied research and sustainable business initiatives.

The stated CIMO activities focus on promoting research and development in Mediterranean mountain areas in two major fields: (i) Socio-ecological resilience and (ii) Sustainable agriculture and innovative agro-food chain. The multiple objectives outlined by the two research groups are of high relevance to the Mediterranean mountain ecosystems, reflect public interest, and some (e.g. “development of sustainable land-use systems”, assessment of “ecosystem function under global change”) present great general interest for international research and global society.

CIMO track record in terms of publication is very impressive (near 1000 SCOPUS publications in 2013-17), but CIMO is also much involved in applied research and partnership with various stakeholders (farmers, forest owners, forest services, industries, etc.). CIMO track record is thus excellent both in terms of publications and of applied research and development (7 patents, 6 pieces of software, 2 brands, partly developed with the contribution of stakeholders), including the creation of several startups. The startup strategy is very well thought-out, and some impressive young ex-PhDs built real success stories as entrepreneurs.

Nevertheless, the evaluation team points out a contradiction between CIMO mission as conveyed by the name of the Center and highlighted in the application, and the high concentration on one particular axis, e.g. food technology (90 % of the PhD students are working in this second axis).

CIMO is very actively involved in international mountain research networks in the Mediterranean region and beyond as well as in EU apparatuses and networks (FP7, ERANET, etc.), which expresses and strengthens CIMO's international visibility. The same can be said of their role in organizing the Mountains conference in 2016.

Participation seems key in the very efficient governance structure “where researchers are actively involved in the decision-making processes of the Center”. In addition to the Advisory Board which is composed of well-known external scientists, the Center works at the interface with non-academic actors (industrial partners, farmers, forest-owners, beekeepers associations, decision-makers) through different bodies (Brigantia, EcoPark, MORE CoLAB).

The strategic plan for 2018-2022 is clearly managed and organized into five goals:

- Extending its research scope (from nature to products); the focus is on engineering (chemical and environmental), energy and biotechnology. Environmental/ecological economics could play a role in this research-and-development field but seems absent.
- Expanding its geographic area of influence, embracing Mediterranean zones beyond Portugal.
- Implementing more collaborative research with industries, associations and entrepreneurs, ensuring knowledge, technology and innovation transfer. MORE CoLab is key here as a collaborative center associating researchers and various stakeholders, and it would be interesting to know more about how topics are selected and translated into research questions as well as what is the actual role of non-academic actors in the process of producing and transferring knowledge.
- Upgrading research capabilities, increasing funding and recruitment of leading researchers.
- Increasing training, grants and contracts for young researchers, PhD students and PhD Researchers.

This is a (extended) continuation of the 2013-17 achievements and looks thus relevant and feasible.

The governance structure includes an external Advisory Board as well as technical bodies (laboratory, computer services, and administration) and looks clearly organized though there is no special emphasis on participatory principles. The role of the External Advisory Board is clearly explained and the competences of the board are well used.

To conclude, CIMO is an excellent Center, with an excellent management, very strong linkages with enterprises and producers, providing new activities in Bragança region.

And last but not least, the gender policy in CIMO is extremely efficient even at the top level of CIMO management.

We propose to focus the PhD fellowships on two main research lines:

- (i) Developing research subjects aimed at better bridging the gap between the two research groups on “socio-ecological systems” and “sustainable processes and products”. For example as regards forest futures, it would be interesting to link socio-economic topics on forest owners practices and researches on high-tech forest monitoring.
- (ii) Developing new research areas in the field of social sciences, such as socio-ecosystem resilience, ecosystem services or innovation. Cultural dimensions of mountain systems should not be seen as just an add-on, or additional activity, but need to be better integrated. This suggestion is also relevant to applied research and knowledge transfer. CIMO should improve their reflexive work on the linkage between innovation/technology and human practices changes/society.

CIMO faces a strategic choice between concentrating on food technology, or a broader view – as currently indicated in its name – on sustainability and socio-ecological systems in mountain zones of the Mediterranean. We see the second option as more promising for establishing CIMO international profile in accordance to its announced mandate. Therefore, the research agenda for 2019-2022 might be further clarified by specifying integrated research approaches and methods to encourage and enable inter-disciplinary research toward the intended “broadening of the scope of research” and capacity building. Therefore, we propose to focus the PhD fellowships and the two PhD researchers on two lines as described above.

With regard to the intended inter- and trans-disciplinary research agenda, relevant points to improve concern :

- (i) Unifying the research strategy through interdisciplinary approaches and methods.
- (ii) Collaborations as well as strategy for (international) capacity building.
- (iii) The research meta-database of the Center, including clarifying the conditions of data access.
- (iv) Developing of in-house expertise or through external collaboration within CIMO for more inter-disciplinary analyses, possibly “on the ground”, i.e.in concrete landscapes context.
- (v) Future hiring should reflect this perspective; more economic and social-science expertise needs to be developed.
- (vi) Development of such integrated methods and tools, their local applications in research and potential applicability for assessments in mountainous landscapes elsewhere.

Given the assertion of participatory governance of CIMO and the actual strong involvement in applied and collaborative research, it could be interesting to formalize the research/enterprise interface within CIMO governance structure. This new hub in CIMO governance would be central to allow the Center to manage its strong involvement in commercial activities (patents, startups, etc.).

Finally, we encourage CIMO to plan for cooperating with Centers focusing on similar topics in the Mediterranean areas like MED.

Evaluation Panel: THEMATIC AREAS - Mediterranean Studies: Agro-food Systems, Water and Energy Resources, Cultural Heritage, and Tourism, Hospitality and Hotel Management

R&D Unit: Centro de Investigação, Desenvolvimento e Inovação em Turismo (CITUR)

Coordinator: Luís Lima Santos

Integrated PhD Researchers: 98

Overall Quality Grade: GOOD

Evaluation Criteria Ratings

- (A) Quality, merit, relevance and internationalization of the R&D activities of the Integrated Researchers in the R&D Unit Application: 3
- (B) Merit of the team of Integrated Researchers: 3
- (C) Appropriateness of objectives, strategy, plan of activities and organization: 2

Base Funding for (2020-2023): 1184 K€

Recommended Programmatic Support

Programmatic Funding: 65 K€.

Justification, Comments and Recommendations

CiTUR is a very broad, nationally extensive and interdisciplinary research network that combines a plethora of approaches to tourism. It aims to give voice to national tourism researchers, build on the tourism research community's strength, combine research resources and interconnect researchers in furnishing future research collaboration.

CiTUR interconnects an extremely large number of 98 researchers from 15 polytechnic institutes and 2 universities, with the goal of contributing to six research themes:

- Tourism economics and management;
- Tourism, hospitality and restaurants;
- e-Tourism;
- Territory and tourist destinations;
- Planning and management of tourist products and animation; and
- Tourism, culture, society and language.

The research themes are aimed to focus the research effort, although this will represent a perennial challenge in terms of possibly restricting opportunities. The selected broad 6 themes are highly relevant to Portugal tourism. The overall number of both the researchers and the themes show that the network may wish to consider a stronger focus and a more discerning approach to including researchers with a focus on quality. At the moment the network is highly inclusive and intends in the future to put more focus on following and furnishing commitment to excellence in scientific production.

It is clear from the application that the group is leveraging from the results of their research in terms of publication outputs and conference activity and especially a significant number of both national and international projects which is clearly a strength of the network. However, resulting from its size, the interconnection of the research output to the overall governance, research themes and nodes represents an important challenge for the network.

The network of researchers seems to provide an important voice to tourism research at the national level, the research outputs are well capitalized for tourism stakeholders and joining resources and strength in the coordination of the past research projects provides benefits for the future strength of the network. Internally, however, the network may wish to focus more on providing more support to its researchers beyond its base function of interconnecting the researchers.

CiTUR has a Scientific Council, Director, Executive Commission, an External Advisory Commission and 6 regional hubs interconnected with 6 thematic areas. The External Advisory Commission would benefit from inclusion of more foreign researchers and a clear strategy on its functions. Internationally the network extends via international nodes – at the moment to Poland, Ecuador and Macao. Yet it is not clear what are the benefits of approaching internationalization via such an approach and there seems to be no well-developed international strategy of the network.

Part of the group of integrated researchers is strong, engaging in innovative and quality research and enhancing knowledge in the tourism domain and moving the research agenda forward. The network interconnects a highly diverse group of researchers. While some of the researchers do not yet show excellence in terms of scientific output, the group is led by a small group of excellent researchers with publications in 4* and 3* journals including Tourism Management and recently the Annals of Tourism Research. Some of the integrated researchers are members of editorial boards, actively engage in collaborations both nationally and internationally and are highly active in the Centre's projects, either as principal or co- investigator or as members of project teams.

The hope is thus that the network will manage to build on the knowledge and experience of excellent researchers within the group in order to facilitate quality research in the future. The PhD students felt empowered by being part of the network, primarily through their supervisors benefiting from the network. More support to junior researchers should be considered, such as for example a formal mentoring scheme.

The main strategy of the group of researchers is to capitalize on their strength in terms of number and national representation of researchers. This makes for a very large network and is an important step towards the interconnection of tourism research in Portugal and thus to empowerment of tourism researchers. The clear strength of the network is the success in coordinating both national and international research projects and it is clear that the management is well aware of the importance of this objective for the future.

However, the size of the network brings with it important weaknesses. The most important ones are the lack of focus, extreme diversity in the quality of research output amongst researchers, and the difficulty of going beyond networking support into extensive internal support to researchers.

The future strategy would benefit from focusing on a number of key objectives:

- Commitment to excellence in scientific production through publications, conferences and the editing of journals. Productivity of researchers is advised to be better monitored in the future in order to lead to an increase in quality of outputs.
- Focus on building the Centre beyond a network: the purpose and the mission are advised to focus more on facilitating excellent research and a support environment to researchers (e.g. addressing specific training needs, formal mentoring, direction of research publications etc.)
- A more strategic approach to internationalisation including international visiting researchers, conferences and collaborators with a specific focus on finding collaborators that would provide support and mentorship to junior researchers.
- Striking a gender balance in the leadership team of the Centre.

The Panel does not support the use of funds for CiTUR internal meeting costs but proposes to spend the funding on internationalization efforts and research equipment.

Evaluation Panel: THEMATIC AREAS - Mediterranean Studies: Agro-food Systems, Water and Energy Resources, Cultural Heritage, and Tourism, Hospitality and Hotel Management

R&D Unit: Centro de Investigação em Património, Educação e Cultura (CIPEC)

Coordinator: Fernando Manuel Raposo

Integrated PhD Researchers: 12

Overall Quality Grade: WEAK

Evaluation Criteria Ratings

- (A) Quality, merit, relevance and internationalization of the R&D activities of the Integrated Researchers in the R&D Unit Application: 3
- (B) Merit of the team of Integrated Researchers: 2
- (C) Appropriateness of objectives, strategy, plan of activities and organization: 1

Justification, Comments and Recommendations

CIPEC is a very new R&D Unit with 12 Integrated PhD Researchers, undergoing their first evaluation process. They focus on the “mapping” and preservation of specific aspects of cultural heritage in the Castelo Branco region, specifically, of local approaches to embroidery and music.

The Evaluation Panel was impressed at the initiative of the CIPEC researchers and their objective to create an R&D Unit at the Polytechnic Institute of Castelo Branco. However, from both the application and the site visit, what was lacking is a clear collective discussion of their scope and goals, as well as an analytical approach to considering what “heritage” means beyond “the preservation of local identities.” This weakness also applied to the notions of territory, mapping, and identity. It is, nonetheless, clear that they are seeking to develop and reach beyond the existing position of the Center, and for this reason, the application is admirable.

CIPEC has some strengths evidenced in the work of individual researchers. However, as of now, their aim and mission is not sufficiently articulated as a Unit within the frame of research, whether more theoretical or applied. Further, it seems that the R&D Unit lack of experience with attracting research funds and in team-based research design impacted not just the quality of the application but the framing of their projects. In this sense, unfortunately, it is possible that the FCT call for applications may have simply come too early for CIPEC. The comments below do not only justify the Evaluation Panel decision, but also aim to provide some constructive feedback and ideas for how to develop CIPEC mission.

Rather than studying cultural heritage in its tangible or intangible dimensions, CIPEC is currently focused largely on the production of cultural heritage. It must be stated clearly that while this is potentially interesting and valuable, such a project in itself does not constitute research. The Unit lacks a clear set of questions or hypotheses, as well as the critical and reflexive elements necessary for a defined set of research goals in the field of cultural heritage. The Evaluation Panel found that, perhaps, as currently articulated, CIPEC purview and mission might fit better in a museum project or regional development project focused explicitly on the production and preservation of local and regional material and immaterial culture. In this sense, it might be worthwhile to look into other funding sources that are not predominantly research-based. In this respect, the solid local (or regional) anchoring of CIPEC can be a valuable strength but this (including local demands for heritage preservation) has to be reflected and problematized as part of a complex process of heritage production and safeguarding.

More broadly, however, the Evaluation Panel found that even though cultural heritage was identified as the key focus of the R&D Unit work, the group did not show sufficient engagement with the complexities of what this term means. This lack of cohesion and critical engagement compromised their description of future projects as well as their work as a team. “Heritage” or patrimony is a deeply contested concept, intimately related to identity politics: that is, who and what is defined as “from” a place (and who and what is excluded). Overall, CIPEC description of heritage did not take account of this complexity. Certain research projects, specifically those on embroidery and music, pointed to a possible interpretation of “heritage” as something that is changing, dynamic, and performed in the present in complex ways. These projects, if framed and articulated more clearly and cohesively with a specific set of research questions, hold promise for a more critically engaged approach to considering “heritage.” As articulated now, however, these are the projects of individual researchers and do not yet command the driving force or vision for the Unit as a whole. If CIPEC decides to continue to develop its research dimensions, it would be worthwhile to grant these projects -- embroidery

and music -- a clearer centrality in shaping CIPEC approach to “heritage” as a dynamic and living formation with important implications for shaping identities. In these two domains, there is room for developing a creative approach to heritage as performance.

In terms of concrete ways forward, CIPEC could benefit from directing attention to learning more clearly how to design and frame team research projects and how to attract third-party funding for research. For instance, the lack of developed and organized CVs in the initial application (while not, in the end, having a substantive impact on the evaluation), pointed to perhaps a misunderstanding or lack of understanding regarding FCT expectations. CIPEC could also benefit from researching, or even engaging in dialogue with, similar initiatives elsewhere in Europe (and the world) and even in Portugal. Specifically, TECHN&ART, a recent initiative at the Polytechnic Institute of Tomar, might be able to provide some know-how and insight regarding how to frame an inquiry into cultural heritage as a research initiative. TECHN&ART have a similar interest in combining art and design with approaches to heritage, and CIPEC might acquire some useful ideas from their initiative if they begin a dialogue with them.

Overall, we found that the plan for the coming years is still considerably vague, thus meriting a ranking of Insufficient. The admirable goal of broadening networks with areas that have cultural ties with the region was mentioned in the application, but it is not substantiated in any clear way. We propose some examples to explain our recommendation: these are all museums of a kind, but really point to the power of what can be done even on a “local” or regional level with critical and thoughtful approaches to the notion of heritage. These institutes might also provide examples or ideas of how to bring together research questions with art or material culture concerns.

http://www.museoetnograficodolomiti.it/nqcontent.cfm?a_id=6673

http://www.archeoveneto.it/portale/wp-content/filemaker/stampa_scheda_estesa_inglese.php?recid=96

<https://www.abbemuseum.org/>

Further, it might be worthwhile to get in contact with the Spanish INCIPIT (Instituto de Ciencias del Patrimonio), in Santiago de Compostela, to see how a high level research on local cultural heritage can be published in platforms that are accessed by the international scientific community. Moreover, INCIPIT is a good Center to extend the internationalization of CIPEC

Overall, CIPEC would greatly benefit from collaborations or discussions with other like institutes in other countries that have successfully married a local/regional approach to cultural heritage with a critical consideration of what this means, thus more effectively highlighting the research dimensions.

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R&D Unit: Centro de Investigação em Turismo, Sustentabilidade e Bem-estar (CinTurs)

Coordinator: Patrícia Susana Lopes Guerrilha dos Santos Pinto Oom do Valle

Integrated PhD Researchers: 35

Overall Quality Grade: VERY GOOD

Evaluation Criteria Ratings

- (A) Quality, merit, relevance and internationalization of the R&D activities of the Integrated Researchers in the R&D Unit Application: 4
- (B) Merit of the team of Integrated Researchers: 4
- (C) Appropriateness of objectives, strategy, plan of activities and organization: 5

Base Funding for (2020-2023): 518 K€

Recommended Programmatic Support

PhD Fellowships: 8

Programmatic Funding: 450 K€, including for 2 (1 Auxiliar, 1 Principal) New PhD Researchers Contracts.

Justification, Comments and Recommendations

CinTurs is the result of the reorientation of CIEO (Research for Spatial and Organizational Dynamics) to the study of tourism, reflecting FCT's reorientation of scientific areas from 7 to 41. The current Centre benefits from the strong productivity of the tourism group. This new focus on tourism is a therefore a significant strength of the group and is designed to deliver a productive research Centre.

CinTurs is an interdisciplinary research Centre that combines approaches from social sciences to to produce and transfer knowledge in tourism and hospitality with the goal of contributing to three research themes:

- Sustainable tourism and territories;
- Tourism and hospitality competitiveness and governance;
- Tourism and stakeholders' well-being.

These themes are highly relevant to the region and to Portugal as a whole. They overtly map onto the UN's Sustainable Development Goals. Whilst it is not possible to encompass all themes within a research Centre, the group may wish to consider a stronger focus on climate change and tourism.

It is clear from the application that the group is leveraging from the results of their research in terms of publication outputs, knowledge transfer and conference activity. The Centre has undertaken a significant number of both national and international projects and the research themes above are designed to focus the research effort here, although this will represent a perennial challenge in terms of possibly restricting opportunities. The Centre has been successful in leveraging knowledge creation through their national and international research projects. This is ongoing and both successful and productive. This is a strength of the Centre.

The Centre has an active PhD network with a clear and transparent strategy of support to these PhD research students. There is a fixed annual research funding per student and the Centre has a responsive attitude to requests for research support, including short courses. This is a clear strength of the Centre.

The Centre is to be congratulated on its knowledge transfer and exchange activities, through conferences and also the journals that they edit.

The Centre has a good track record in terms of internationalization. The visit demonstrated the significant advances in internationalization including international visiting researchers, conferences and collaborators. This is a key strength of the Centre.

CinTurs has Executive, Coordinator, Monitoring and Scientific Boards. The Executive Board includes the President and the two Vice-Presidents of the Unit. The External Monitoring Board includes both Portuguese and international

members. The Scientific Board includes all integrated PhD members. The coordination of the committees and leadership of the executive board was less clear and this is a weakness. The external advisory board would benefit from a refresh including up and coming tourism researchers from other geographical regions. The Panel was impressed by the gender balance of the Centre in general, and the leadership team in particular.

The Centre is well organised and understands how to facilitate excellent research. Both the researchers and the PhD students clearly felt empowered by the Centre and to be a part of its community. The Centre is overtly supportive of junior researchers, although there is no formal mentoring scheme - which is something that should be considered.

The Centre's group of integrated researchers is strong, engaging in innovative and quality research and enhancing knowledge in the tourism domain and moving the research agenda forward. The group is led by a small group of excellent researchers with publications on 4* and 3* journals including *Tourism Management* and the *Journal of Sustainable Tourism*. Members of the team of integrated researchers are on editorial boards, actively engage in collaborations both nationally and internationally and are highly active in the Centre's projects, either as principal or co-investigators or as members of project teams. The integrated researchers are also highly involved in postgraduate supervision, service to the subject area through, say the organization of conferences, and are also engaged with the tourism sector both in the region and nationally. The team is to be congratulated on the managed balance of research activities which are instrumental in delivering excellence in research outputs.

The Centre's strategy is to be applauded – it is both clear and well articulated and overtly designed to deliver quality research outputs, both locally and internationally. The coherence of the strategy mission, objectives and annual plans is excellent.

The strategy is focused on a number of key objectives shaping the future of the Centre:

- Commitment to excellence in scientific production through publications, conferences and the editing of two journals. Productivity of researchers is monitored using a series of metrics and this will lead to an increase in quality of outputs.
- Encouraging the exchange of knowledge through organization of conferences and training. Aside from the conferences, knowledge transfer tends to be within the region, fulfilling the Centre's regional mandate. Balancing the international and regional mandate is a challenge but the Centre seems to be managing this tension well. Consideration of the 'impact' of the Centre's research would add a useful discipline to the Centre's activities and metrics.
- Multidisciplinary research and collaborative processes. The Centre is clearly highly collaborative and encourages active collaboration both within the Centre and with external partners. The multidisciplinary nature of tourism is embraced by the Centre and reflected in its projects, publications and conferences and this is to be applauded. Recognition of the imperative for collaboration in tourism research is also a strength of the Centre.
- Internationalisation is a key strategic objective for the Centre and this has a clear strategy for the future. This is a strength of the Centre.

The requested budget includes items for innovative 'wearable' software, which allow for cutting edge research; GIS software which will be essential for the work on destinations, as well as more standard software licenses such as NVivo and structural equation modeling. We strongly favor the continued internationalization of the Centre and would like to see that enhanced; we therefore recommend that 100,000 euros are devoted to this from the FCT programmatic budget. The project funding for the Centre is appropriate for the size and ambition of the Centre.

Given the early stage of the development of the Centre, we recommend that 2 integrated researchers are provided from the FCT budget. These should be at principal and auxiliary level to allow for the building of capacity in the Centre.

The Centre's pluriannual plan for PhD fellowships is ambitious, reflecting the philosophy of the Centre overall. The PhD themes are relevant and cutting edge; all will be of benefit to the region. Prioritising upon these themes will be a challenge for the management of the Centre. The PhD fellowships also integrate collaborations with other universities and this is to be applauded. We recommend that 8 PhD fellowships are allocated to the Centre.

We recommend the partial application of funding to be received in internationalisation as this is a priority for the Centre.

Evaluation Panel: THEMATIC AREAS - Mediterranean Studies: Agro-food Systems, Water and Energy Resources, Cultural Heritage, and Tourism, Hospitality and Hotel Management

R&D Unit: Centro de Tecnologia, Restauro e Valorização das Artes (TECH&ART)

Coordinator: João Paulo Pereira Freitas Coroado

Integrated PhD Researchers: 21

Overall Quality Grade: VERY GOOD

Evaluation Criteria Ratings

- (A) Quality, merit, relevance and internationalization of the R&D activities of the Integrated Researchers in the R&D Unit Application: 4
- (B) Merit of the team of Integrated Researchers: 4
- (C) Appropriateness of objectives, strategy, plan of activities and organization: 3

Base Funding for (2020-2023): 285 K€

Recommended Programmatic Support

PhD Fellowships: 2

Programmatic Funding: 271 K€, including for 1 (Auxiliar) New PhD Researcher Contract.

Justification, Comments and Recommendations

TECH&ART is a rather small (27 integrated researchers and 47 collaborators) institution focusing on artistic and cultural heritage. Its research strategy revolves around two main areas: safeguard and promotion/enhancement. The first area consists of the two classic lines of (i) action (conservation and restoration) and (ii) knowledge production (characterization and contextualization of heritage assets). The promotion component focuses on (i) didactic and communication elements, with a technological dimension, as well as (ii) a more creative dimension as a means for actively preserving material and immaterial cultural legacies with explicit reference to the changing and dynamic context of the present (see the Creative Conservation Project). This latter component also includes a theoretical reflection on this subject matter. However, it would be good to highlight the publications resulting from this reflection. Furthermore, the impact in society of the developed projects and results in the 2013-2017 period is noteworthy and it is one of the strengths of the PhD team of the Center.

Overall, the thematic organization of TECH&ART appeared clear and internally consistent and the interdisciplinary approach well advanced, linking social science (even if the possible involvement of the different disciplines is not clearly presented), technology (and different media, such as the documentary films produced by the “Holy Week of Sardoal Project”), humanities and arts.

The Center is still young and as such it is at the beginning of a promising process and project aiming at bringing together classical expertise in conservation science with a potentially innovative approach in creative conservation. The latter concept is highly interesting and potentially very productive, wedding the seemingly contradictory projects of salvaging cultural heritage and re-curating it in creative ways. In the future, it would deserve in-depth theoretical reflection as well as reflexive thoughts about its practical applications.

For instance, the project on “The use of ICT and gamification in the promotion of tourism and heritage” looks intriguing. The link with (cultural/heritage) tourism is explicit through the development of interactive mechanisms and “the gamification as a strategy to restructure tourism”. However, the link between tourism and sustainability is announced, but not yet problematized. One cannot help wondering whether developing QR codes and audio-guides pertains to the mission of a research institute even in its applied component. The creation in 2016 of a start-up in this field (Alcançar Memórias Lda) constitutes a response to this comment but the relationship between this firm and TECH&ART would deserve explanation.

The plan of activities for 2018-2022 is still organized around the pair of safeguard/enhancement, each divided in two sub-themes. However the range of the planned projects is much broader including several new projects: “Bio-deterioration of cultural heritage”, “Housing architecture”, “Valorization of the Graphic Industry and Graphic Design Heritage”, “Mapping the cinematic legacy of the Médio Tejo”, “Literature, cinema, memories and places”. It is difficult

to assess the feasibility of these projects in terms of human resources and funding, and the articulations and potential cross-fertilizations between these new projects, and with the older ones, are not documented.

An important task is to articulate these projects around a reflection on the notion of cultural heritage: How a creative conservation approach can reshape and reappraise it. In the same vein, one must encourage the Center to continue the reflection on the articulation between sustainable development and cultural heritage.

Governance and research need to be closely interlinked and TECHN&ART urgently needs to develop a structured way of interaction among members of the R&D Unit both on the managerial and the intellectual level. This means clarifying the governance structure and organizing spaces for scientific interaction such as regular meetings, internal scientific workshops, a working paper series, and the invitation of external researchers working in similar fields for scientific exchange and networking.

As regards international visibility (which looks insufficient for 2013-17; members should encourage the effort to publish in journals with high impact factors), "TECHN&ART wishes to expand its R&D network by increasing the number of partnerships and developing joint projects both on a national and international level." There are several mentions of this objective but without specifying which international partners could be involved (and the presentation of activities for 2013-17 mainly speaks of Portuguese collaborations). The Center has access to high value heritage objects, an important starting point to publish high relevant scientific publications. More broadly, it is essential to formulate a clear strategy for internationalizing the Center in terms of scientific orientations and targeted partnerships and collaborations. Given the potentially highly innovative approach that TECHN&ART offers through its program of Creative Conservation, it might be worthwhile to focus on building an international network of similarly innovative conservation projects engaged in critical and reflexive work on the meaning and significance of heritage.

TECHN&ART and Hercules are both working in the field of cultural heritage science and conservation: Hercules with their highly technical approach and resources to conservation, and TECHN&ART with their more creative and reflexive approach. They should find a way to benefit from their differently articulated present and future assets, in the interest of bringing their complementary strengths together and developing national leadership in their fields of expertise.

Following the observation that TECHN&ART should reflexively improve the articulation between classical and creative conservation, the Panel recommends that 2 PhD fellowships should be awarded in the humanities, the social sciences and/or science and technology studies (STS), in order to form the nucleus of a new research pole under the leadership of a newly-to-be hired Principal Researcher.

The Panel recommends that TECHN&ART hires an PhD Assistant Researcher in the humanities, social sciences and/or science and technology studies (STS) to gain the necessary expertise to develop the corresponding field, and supervise respective PhD students (see 5.1.3). It is particularly important to continue and deepen the reflection on the articulation between sustainability, development and cultural heritage as well as between traditional and creative conservation and creation, as this is where TECHN&ART has the potential to make a particularly innovative and transformative intervention. The human resources should be awarded primarily in these fields.

The funds requested for external missions for TECHN&ART researchers and the invitation of visiting researchers will help develop the internationalization and networking strategy necessary to enhance the Centre profile.

The Panel considers relevant the demand for portable equipment (portable colorimeter) given that the vast majority of the projects to be developed involve fieldwork and the hiring of specialized transportation services for works of art.

Evaluation Panel: THEMATIC AREAS - Mediterranean Studies: Agro-food Systems, Water and Energy Resources, Cultural Heritage, and Tourism, Hospitality and Hotel Management

R&D Unit: Instituto Mediterrâneo para a Agricultura, Ambiente e Desenvolvimento (MED)

Coordinator: Maria Teresa Amado Pinto Correia

Integrated PhD Researchers: 156

Overall Quality Grade: EXCELLENT

Evaluation Criteria Ratings

- (A) Quality, merit, relevance and internationalization of the R&D activities of the Integrated Researchers in the R&D Unit Application: 5
- (B) Merit of the team of Integrated Researchers: 5
- (C) Appropriateness of objectives, strategy, plan of activities and organization: 5

Base Funding for (2020-2023): 2721 K€

Recommended Programmatic Support

PhD Fellowships: 10

Programmatic Funding: 645 K€, including for 3 (2 Junior, 1 Auxiliar) New PhD Researchers Contracts.

Justification, Comments and Recommendations

MED is a recent and large R&D Centre (181 Integrated Researchers in 2017; budget request for 2018-22: 3.8 mi €) resulting from the fusion of four previously existing Units. The overall objective for 2013-17 is to “assess and support sustainability of Mediterranean agriculture and related ecosystems” with a focus on resource use efficiency, sustainable food systems, applied ecology/conservation, resilience/adaptation under climate change pressure. Its historical heterogeneity can be a challenge but the Centre has turned this into an asset, as demonstrated by the clear presentations (report and visit) of its interdisciplinary, systemic and multi-scalar approach combined with modelling and scenario techniques. MED as a newly formed institute has a focus on the main topics for the future of Mediterranean land use, ecosystems and food security.

Its constituent parts have excellent track records in terms of quality of research (4.35 peer-reviewed publications per researcher, 2016-2018), national and international fundraising as well as the international character of its networks and its publications.

The Centre is organized in a matrix with two axes: nine research groups focusing on scientific areas and eight thematic lines focusing on MED/society interactions. We were impressed by the quality of this fine organization.

MED manages their organization by using core funding for three strategic purposes which are totally supported by the Panel:

- “To be able to follow a strategic research policy, to support research typically not funded by competitive funding, as exploratory, interdisciplinary research or even transdisciplinary research aiming for a co-construction process between research and practice”.
- “To have an overarching and cross cutting science and research management, creating the conditions for attractiveness and support of international researchers and managing the linkages in the region and the international networking. In our application we foresee to create the position of an Executive Director to support the MED board and director, and we see this as fundamental in such a large, multidimensional and interdisciplinary Unit as MED”.
- “To be able to consistently advance in research on the strategic use of water, efficient irrigation methods and their impacts, and adaptation to climate change as well as mitigation measures, MED needs to be able to use experimental plots equipped with irrigation infrastructures and driven according to research needs. Therefore core funding to this infrastructure is strategic”.

The application is very clear, which can be taken as a reflection of a well-run organization. The site visit reinforced this impression. The Panel was impressed by the free and rich exchanges with PhDs, Junior Integrated Researchers, and the staff. MED international dimension is obvious according to various indicators: international conferences, publications,

participation in international networks, awards, fundraising, 36 international projects (of which 11 H2020, 5 ERASMUS, and the first H2020 managed in this field by MED in Portugal) in 2013-17.

The study of the impacts of human activities and climate change will expand to farming systems, environmental resources and rural communities, meaning a need for strong interdisciplinary work inside the team between natural and social sciences. However, of the nine research groups, only one is explicitly social science-oriented even though the five main objectives all have a social science/societal dimension.

The applied dimension in the team organization is supported by an explicit will to tackle “questions formulated by farmers, agro-food enterprises, sector organizations and public administration” and by the place given to knowledge transfer as a “research-associated activity” in a science-society dialogue perspective.

The five items selected for presentation during the onsite visit (conservation agriculture, agro-silvo-pastoral systems, interdisciplinarity, food quality, climate change) were convincing in terms of relevance and achievements.

The team organization is clear and efficient, and the responsibilities are well balanced. Last but not least, the gender balance is remarkable (58% female/42% male in the group of Integrated Researchers, and 53% female/47 % male in international project management).

To conclude, the Panel:

- Strongly supports MED policy of branching into pluri-disciplinary reflective research;
- recognizes their excellent capacity to support PhD students of diverse disciplinary backgrounds;
- recognizes the highly sophisticated reflection on the concept of the “Mediterranean”, as well as putting multi-disciplinary work into practice, and encourages MED to be a national and international reference in the field of society-science interface.

The Panel proposes to award more PhD fellowships than demanded, thus recognizing the Centre excellent capacity to support PhD students of diverse disciplinary backgrounds with the objective to achieve greater equity among PhD students who received funding, and those who are self-funded.

The Panel encourages MED:

- To expand and explore in innovative ways the exploratory domains of cross-disciplinary development, as well as of transdisciplinary work.
- To expand interdisciplinarity and cross-fertilize among its several competence areas, in innovative and cutting edge domains at the team scale : PhD students will form a group of cross-cutting young researchers bridging among competence clusters already installed in MED, and creating new domains of knowledge production.

Our main concern is about the articulation of the nine Research Groups, the eleven thematic lines and the five main objectives, e.g. (1) Improve Resources Use Efficiency, (2) Improve Sustainability of the Food System, (3) Assure Biodiversity Conservation and Landscape Multifunctionality, (4) Promote Organizational Capability and Governance Mechanisms, (5) Foster Resilience and Adaptation to Climate Change Scenarios, (6) Promote a One Health approach. We propose to MED to focus team management on these articulations, and their management for the future.

The Programmatic Funding should be used to sustain the very sophisticated reflection on the concept of the Mediterranean (as context, as research object, as research approach), as well as putting multi-disciplinary work into practice. The Panel encourages MED to be a national and international reference in this respect of society-science interface for the Mediterranean studies.

Evaluation Panel: THEMATIC AREAS - Mediterranean Studies: Agro-food Systems, Water and Energy Resources, Cultural Heritage, and Tourism, Hospitality and Hotel Management

R&D Unit: Laboratório HERCULES - Herança Cultural, Estudos e Salvaguarda (HERCULES)

Coordinator: António José Estevão Grande Candeias

Integrated PhD Researchers: 27

Overall Quality Grade: EXCELLENT

Evaluation Criteria Ratings

- (A) Quality, merit, relevance and internationalization of the R&D activities of the Integrated Researchers in the R&D Unit Application: 5
- (B) Merit of the team of Integrated Researchers: 5
- (C) Appropriateness of objectives, strategy, plan of activities and organization: 4

Base Funding for (2020-2023): 491 K€

Recommended Programmatic Support

PhD Fellowships: 8

Programmatic Funding: 835 K€, including for 2 (1 Junior, 1 Principal) New PhD Researchers Contracts.

Justification, Comments and Recommendations

HERCULES is a productive (by any measure) research institute dedicated to scientific approaches to the identification and conservation of tangible cultural heritage. It is a unique research infrastructure in Portugal and a landmark in Europe. It has the technical expertise, facilities, and instrumentation to accomplish their objectives. Their success in the international realm of peer-reviewed journal-based publications is a testament to their talents. They are also involved in training new generations of scholars with 25 current PhD students, and 9 PhD degrees, 46 MSCs and 54 undergraduate degrees over the past 3 years. Furthermore, the research staff is actively involved in collaborative research with scholars and institutes from Italy, the Vatican, Spain, France, Morocco, India, Oman, Brazil, and Angola, many of which lack the tools, techniques, expertise and financial support to carry out the kinds of analyses and experimentation that HERCULES makes possible

For a R&D Unit that only began this decade, HERCULES has been extremely successful in establishing research facilities (including a mobile one) with high-end equipment and a research staff sufficiently knowledgeable to apply it constructively. For example, they have made progress in the identification of and mitigation against biogenic compounds that compromise the integrity of non-renewable cultural resources (such as mural paintings); and they have a full-spectrum of instruments and methods to identify the provenance of material culture, to assess the authenticity and integrity of material culture, and to understand the very composition of that material culture. They also have a facility for the analysis of stable isotopes, which serves a variety of purposes related to raw material identification, but also analysis of biogeochemical processes, which can reveal metabolic signatures in human and animal bone as well as environmental signatures in cave calcite, soils, water, etc. All of these offerings are in high demand, both nationally and internationally, among research groups (universities, museums, and government agencies) devoted to the protection (i.e. conservation) and presentation (namely public, but also professional/academic) of material culture. The international literature on these subjects is enormous, affects the trade (and therefore trade value) of antiquities, informs government policy about cultural heritage, and indirectly affects public exposure to, and perhaps appreciation for, cultural heritage values and initiatives. For all of these reasons, the scholarly agenda set forth by HERCULES also makes a considerable direct and indirect economic contribution to the region.

The objectives of the plan of activities for 2018-2022 are in coherence with the expertise and the trajectory of the Centre. The HERCULES Lab is supported by both a strong analytic infrastructure and skilled human resources, which is an exceptional value for the strategic plan for 2018-2022. The Centre seems to have followed the Scientific Advisory Board recommendations reported after the evaluation of the Lab in the 2014-2018 period. However, aspects related to the international position, digital infrastructures, and attracting young scientists under a multidisciplinary point of view, should be better integrated in the strategic plan for 2018-2022. The strategy for the research plan for 2018-2022 seems to be appropriate, although not described in much detail. It is credible in view of the previous results of the Centre and the expertise of the PhD researchers involved in the Centre. The international recognition of activities should be

reinforced in the future. Ethical issues have been taken into account. The general distribution of the planned budget is reasonable and justified.

However, the Panel was concerned by the fact that the vast majority of the research conducted through HERCULES contributes little to academic research outside of issues specific to the analysis of material culture. By focusing strictly on the “hard” scientific approach to materials (namely through basic, but difficult-to-answer questions like “what is it”, “what is it made of”, “when was it made”, “where [possibly] is it from”, and “how can we keep it around longer” – the notion of “science for heritage” conservation is not defined), HERCULES risks to reduce its role to that of a simple lab, without moving beyond a common sense understanding of cultural heritage, and thus to fail to further understandings of humanity through a more complete understanding of history, and a history of how people work. The Centre announces a strong involvement in consultancy/dialogue with companies and other non-academic stakeholders, and in knowledge transfer. But it tackles the latter point through technological lenses (HIT3CH Interface) whereas it would deserve reflection from a social science point of view in terms of science-society relations, science-policy interface or regulatory science. HERCULES thus may miss out on opportunities to expand public (and governmental) understanding of and appreciation for the processes of human history, without contributing to the crucial global literature that cultivates compassion and sensitivity through these appreciations and understandings. Given this shortcoming, HERCULES is at risk of not fulfilling their stated objective to “increase knowledge and valorisation of cultural heritage”, which is necessary in order for them to become a Portuguese and international reference institution, in a complete sense, in the broad field of cultural heritage studies, and to contribute to the anchor area of cultural heritage which the University of Évora has established, as well as to be one of the pillars of the Alentejo Region Smart Specialization strategy.

In summary, HERCULES is an essential scientific resource in Portugal, throughout the Mediterranean, and beyond. It should be funded to maintain and enhance its current trajectory. Its institutional collaborations are excellent, and so are its educational programs. It is to be expected that another decade of growth will bring more international exposure, and greater social impact, both publicly and politically. The Panel suggests to expand the nature of collaborations (with institutions, agencies, and individuals) to support projects that achieve more prominent global scientific impact. Research projects and publications that speak more to the processes of human and ecological history, as well as biological and cultural change, achieve greater publication rates in the highest profile journals (e.g. Science, Nature, PNAS, etc.), and therefore reach a larger and more diverse professional audience, which in-turn leads to broader and more wide-spread exposure to the public through professional news media and social media networks.

Following the observation that Hercules should expand its activities beyond a purely lab and technology-driven Centre to become a reference institution also in a more reflexive discussion of cultural heritage, the Panel recommends that some these PhD fellowships should be awarded in the humanities, the social sciences and/or science and technology studies (STS), in order to form the nucleus of a new research pole under the leadership of a newly-to-be hired principal researcher.

No data have been provided to explain how the efforts in teaching (at the PhD, MSc, and UG levels) contribute to the development of next generation scholarship among partnering institutions, particularly those in countries lacking the infrastructure to support it. It is recommended that HERCULES develop a strategy in this respect. However, an important strength of the program is the ARCHMAT MSc program comprised of partnering institutions from seven other countries, currently with students from ~50 countries. It can be expected that it is only a matter of time until the influence of this program starts to become visible internationally.

The Panel recommends that HERCULES hire a principal PhD researcher in the humanities, social sciences and/or science and technology studies (STS) to gain the necessary expertise to develop the corresponding field, and supervise respective PhD students.

Equipment: Hercules is either responsible for or takes part in projects where a wide range of materials (archaeological, artistic, environmental, biological and food based samples) requires non-target analysis of organic compounds (screening for unknown compounds) and target-compound quantitative analysis. The instrument needed for these analyses must be capable of providing high sensitivity and, at the same time, high mass accuracy in order to identify the organic compounds with a high degree of confidence and be amendable to be used in proteomics. High mass accuracy and high sensitivity are also necessary for quantitative target analysis of compounds that are not amenable with normal LC-MS because of e.g. interferences from similar groups of chemicals. Therefore, the Panel supports HERCULES request for 250.000€ to acquire a state-of-art LC-MS to improve its analytical capabilities regarding organic compounds analyses. The acquisition of this new LC-MS system will also contribute to support the HERCULES Lab educational role, because

the future students will have the opportunity to be introduced to the most widely used high-resolution mass analyser. Similar arguments apply for the requested acquisition of a drone.

Evaluation Panel: THEMATIC AREAS - Mediterranean Studies: Agro-food Systems, Water and Energy Resources, Cultural Heritage, and Tourism, Hospitality and Hotel Management

R&D Unit: Unidade de Investigação Aplicada em Gestão (UNIAG)

Coordinator: Paula Odete Fernandes

Integrated PhD Researchers: 14

Overall Quality Grade: GOOD

Evaluation Criteria Ratings

- (A) Quality, merit, relevance and internationalization of the R&D activities of the Integrated Researchers in the R&D Unit Application: 3
- (B) Merit of the team of Integrated Researchers: 3
- (C) Appropriateness of objectives, strategy, plan of activities and organization: 4

Base Funding for (2020-2023): 174 K€

Recommended Programmatic Support

PhD Fellowships: 4

Programmatic Funding: 255 K€, including for 1 (Principal) New PhD Researcher Contract.

Justification, Comments and Recommendations

UNIAG is a multidisciplinary R&D Centre that combines a range of disciplines from management and social sciences with tourism. It has a mission to promote and develop scientific research, develop a strong link between theory and practice and transfer knowledge to society. The strategic plan includes 5 strands, broadly:

- Promotion of regional and cross-border development;
- The creation of international partnerships to collect, preserve and disseminate the heritage of the Northern region of Portugal;
- Promotion of innovative solutions in the management of public, private and third sector institutions to enhance sustainable development;
- Development of entrepreneurial capacity; and
- Development of ICT mechanisms and models to promote the modernization of infrastructures and their adoption to the digital age.

These themes are relevant to the region and beyond. The Centre has relevance to the tourism sector nationally and specifically in Northern Portugal, with ambitions to promote the heritage of the region internationally. Within these strategic goals the Centre has a plan of activities to enable them to be realized, that are appropriate for the development of the Centre. To provide a clearer direction for research, the team may wish to identify more focused research themes. It is clear from the application that the group is leveraging the expertise and strengths of their different disciplinary backgrounds, and they are working towards making the transition more towards tourism. The Centre has undertaken research projects both in management and tourism, national and international. An increase in the number of funded projects will be crucial to the Centre in terms of meeting its strategic goals and knowledge exchange activities.

The Centre is increasing its international reach, making use of available schemes to do so. The Advisory Board currently includes members from EU countries, and this group could be more productively engaged and potentially widened. Hosting an international conference could be useful to raise the profile of the Centre within Portugal and beyond, and they have made plans in the budget to host a biannual international congress on cross-border tourism and regional development.

There is evidence of good quality research in the Centre. The Centre is advised to work towards targeting higher quality journals, and develop a strategy to realise this potential. This is possibly one of the biggest challenges, and a potential way forward would be to capitalize on the multidisciplinary nature of the researchers, producing outputs relevant for tourism but underpinned by broader disciplines. The Centre is proposing a new journal as part of knowledge transfer, but this may not be the best mechanism through which to do so. A journal is resource intensive and could be a distraction from raising research quality. The Centre should focus more on international publications, and this is where future efforts could be focused possibly through collaboration/co-authorship with international researchers.

Despite only being recognised by FCT in 2016, the Centre is on an upward trajectory with clear potential.

This is a collegiate team who are making the transition from a management to a tourism Unit. It is clear they are willing to make this transition and to draw upon their different disciplinary strengths. The team are clearly committed to working collaboratively across their different disciplines, subjects and locations. They have been consistently producing outputs, with the ratio of scientific publications increasing since 2013, and this is to be commended. There is evidence of high quality outputs, presently limited to only a few members a small number of the team. Some have stronger research profiles than others, but the group are supportive of less experienced researchers. The team of researchers are experienced in the supervision of Master's theses, with currently a lack of doctoral students a constraint. The team members are represented on journal boards and scientific committees of conferences. The team have also contributed to empirical work that has practical relevance for a variety of stakeholders outside of academia. The overwhelming impression from the visit was of a committed and collaborative team, and this should be commended. There is also evidence of gender balance amongst the leadership and composition of the team.

The Centre has a clear and coherent strategy, with a plan of activities that reflect the strategic direction.

The organisation of the Unit led by the Polytechnic Institute of Bragança has an appropriate structure and clear lines of reporting and management consisting of a coordinating committee and a scientific committee. The four institutes have worked together with regard to taught Masters programmes. Despite the geographical dispersion of the members of the Centre, there is clear evidence of meetings and collaboration, both face-to-face and remotely.

The requested budget includes items for PhD fellowships, hiring a post-doc researcher, participation in infrastructures and international networks, a congress, and the development of an annual scientific journal. The project funding requested is appropriate for the size and ambition of the Centre. As mentioned previously, the need for the journal requires further consideration is not a priority of the Centre as it would detract energies away from the more urgent tasks in building the Centre.

The Centre is currently constrained by a lack of PhD students, who are vital in a research community. The identified themes and collaborating institutions for possible PhD fellowships are relevant and contemporary, and will be of benefit to the region. The Centre is seeking to offer the fellowships opportunities to their outstanding Masters students, contributing to the development of research careers.

Given the early stage of the development of the Centre, the researcher hired should be at the senior level so they can provide research support and guidance, and build capacity in the Centre. He/she should have credentials preferably in the tourism domain to reflect the strategic direction of the Center away from management studies.

The funds awarded reflect the Panel views regarding the needs of the R&D Unit. The recruitment of the PhD researcher at Principal level is to be able to support and advice in the development of further high quality research. This new researcher to be hired should have credentials preferably in the tourism domain to reflect the strategic direction of the Center away from management studies. The award of the PhD fellowships reflects the need to enable the beginnings of a doctoral community. Funds have been awarded specifically to facilitate internationalisation. The Panel does not support the use of the funds for the proposed journal. Funds have been awarded for equipment to support research needs.