IN2PAST

LABORATÓRIO ASSOCIADO PARA A INVESTIGAÇÃO EINOVAÇÃO EM PATRIMÓNIO, ARTES, SUSTENTABILIDADE E TERRITÓRIO

ASSOCIATE LABORATORY FOR RESEARCH AND INNOVATION IN HERITAGE, ARTS, SUSTAINABILITY AND TERRITORY

Coordinator: António José Estêvão Grande Candeias

Scientific Areas: History and Archaeology, Arts, Chemical Sciences, Other Natural Sciences, Other Humanities.

Thematic Lines:

TL1 — Science and Technology for Cultural Heritage

TL2 — Landscapes, Territories and Cultural Heritage

TL3 — Museums, Monuments and their Collections

TL4 — Archives, from Preventive Preservation to Digitalisation

TL5 — Cultural Circulation, Public Policies on Memory and Inclusive Citizenship

Main Management Institution: Universidade de Évora (UE)

Participating and Management Institutions:

Centro em Rede de Investigação em Antropologia (CRIA) ISCTE - Instituto Universitário de Lisboa (ISCTE-IUL) Universidade de Coimbra (UC) Universidade do Minho (UM) Universidade Nova de Lisboa (UNL)

Main R&D Unit and Proponent Institution:

HERCULES Laboratory - Cultural Heritage, Studies and Safeguard

Other R&D Units in the LA:

Landscapes, Heritage and Territory Laboratory (LAB2PT)

Art History Institute (IHA)

Centre for Art History and Artistic Research (CHAIA)

Institute of Contemporary History (IHC)

Centre for Research in Anthropology (CRIA)

Centre for the Study of the Sociology and Aesthetics of Music (CESEM)

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A. Introducing IN2PAST

A.1. Scientific Careers: Development strategy

This application gathers seven leading research units (RUs) whose activity has been supported and developed by researchers in mainly two types of employment: permanent staff (higher education professors) and researchers with a fixed-term contract or postdoctoral fellowship.

Of the 331 researchers on this team, 210 are higher education professors, mostly tenure tracked, and mainly at the UE, UNL and UM, but also at ISCTE-IUL, UC and other institutions. All these institutions have agreed to guarantee the effective integration of professors and researchers at the LA. Among the professors, there are 14 Full Professors and 37 Associate Professors, the remaining being Assistant Professors.

113 members of the team are researchers working full-time at the associated RUs, with different types of fixed-term employment contracts or fellowships — most of them funded directly or indirectly by FCT's programs (such as iFCT, CEEC, etc.). Among the researchers, there are 5 Principal Researchers (PRs), 10 Assistant Researchers (ARs), and 87 Junior Researchers (JRs) or postdoctoral fellows.

IN2PAST's constitution as an Associate Laboratory and the current application find their main inspiration in the sharing of technical skills, scientific interests, and cultural and social concerns by the research teams of each of the RUs associated to this proposal. However, the need to find career-level answers for the hired researchers and postdoctoral fellows working in the disciplinary and knowledge transfer areas of the associated RUs is also a motivating factor. The possibility of establishing research careers in IN2PAST's fields of operation will serve to repair precarious labour conditions while simultaneously improving and renewing the country's scientific capacity in those same fields.

Moreover, it should be highlighted that IN2PAST has established a strategic partnership with the General Directorate for Cultural Heritage (DGPC) and it will foster the institutional conditions and the professional and scientific environments suitable for a future integration of the researchers currently working at the labs of this government body (José de Figueiredo Conservation and Restoration Laboratory; CNAN Conservation and Restoration Laboratory; and LARC — Archaeosciences Laboratory).

A.2. Scientific Careers: Annual Plans for the First Five Years

None of the associate RUs has researchers with permanent or open-ended contracts. Linked to our proposal, however, we have obtained from the universities that manage the RUs involved in this project their commitment regarding the establishment of research careers, including the hiring of more than 10% of the research team under permanent or open-ended contracts in a 5-year horizon.

In the first five years of operations, IN2PAST will hire 34 researchers (plus one Principal Researcher as a result of the PREVPAP programme) with permanent or open-ended contracts. At the end of those five years, we predict securing a total of 320 integrated researchers with PhDs, as a significant part of the full-time researchers currently integrated in the team have contracts that will end before 2025. This possible decrease in the number of full-time researchers will be countered by the 35 contracts already mentioned as well by securing a number of positions through competitive FCT calls (CEEC individual programme, R&D projects) and international funding (teams in ERC Grants and other EU-funded projects).

The yearly hiring plan that we present here aims to mostly hire ARs. In a 5-year period, this will allow us to consolidate a core of full-time researchers without the teaching and academic obligations that weigh on the professors. By securing career positions, these contracts will protect the collective work

from project discontinuities entailed by contractual instability. Moreover, to ensure the consolidation of the above-mentioned core, hires are mainly planned for IN2PAST's first two years.

The investment strategy of hiring ARs also allows for the build-up of a team with a relatively low age average, attracting young national and foreign researchers with promising track-records, thus pursuing a strategy of applications to ERC Grants (with an emphasis on ERC Starting Grants) and Horizon Europe projects.

This investment in a stable and young research team will be tempered by the hiring of one PR, plus a PR that is on-track to be hired as a full-time researcher under the Portuguese state programme PREVPAP.

In a second phase (years 6 to 10), IN2PAST aims to open PR and CR-level positions, with three main objectives: firstly, to create opportunities for professors to be replaced by researchers coordinating TLs; secondly, to attract advanced-career level researchers, benefitting from the international consolidation attained on the first five years of operations; thirdly, to retain ARs that will be coveted by foreign universities and other R&D institutions.

In the first year of activity (2021), IN2PAST will hire 23 ARs. Six of these will be hired by the UE; ten by UNL; three by the UM; two by ISCTE-IUL; one by the UC; and one by CRIA.

In the second year (2022), the LA will hire seven ARs. Four of these will be hired by the UE; two by UNL; one by the UM. The UE will also hire one PR.

In the third year (2023), the LA will hire two ARs, both by the UM.

In the fourth year (2024), the LA will hire one AR, at the UC.

Besides these, in 2021 IN2PAST will benefit from the hiring of one PR by UNL within the framework of PREVPAP.

In order to intensify the cooperation between the different TLs, researchers may be hired to work under more than one TL. Their primary affiliation with one TL will, however, lead to five permanent or openended contracts per each of the five Lines after five years of operations.

After five years of operations, the LA will thus have at least 10,9% of PhD-holding researchers with permanent or open-ended contracts integrated in scientific careers (excluding the ones hired as professors). We are predicting to reach a total of 320 researchers in the set of associated RUs.

A.3. IN2PAST and the Portuguese Roadmap of Research Infrastructures

IN2PAST is committed to providing interoperability for cultural heritage data. It will work with the ROSSIO infrastructure (coordinated by the NOVA School of Social Sciences and Humanities, FCSH) from RNIIE and DARIAH ERIC for storing and sharing scientific cultural heritage data, enhancing the use of digital data and increasing the number of accessible datasets through the large data storage and preservation facilities distributed among the partners.

Crucially, considering that the super computer OBLIVION of the ENGAGE SKA infrastructure is hosted at the UE (host institution of HERCULES Lab and CHAIA), IN2PAST will be able to use this facility to provide storage, identity federation and A-A-A (Access-Authentication-Authorization) services, enabling a one-stop interface to all its on-line content, open access to publications, open access to data and deployment of e-infrastructures. IN2PAST will set up a Heritage Sciences Gateway as the front-end, linking researchers and data.

Furthermore, ERIHS.pt infrastructure, RNIIE joint distributed infrastructure coordinated by HERCULES Lab, with the participation of LNEC and LJF-DGPC, is focused on providing access to its fixed analytical facilities and mobile laboratory unit. HERCULES Lab will act as a representative partner of ERIHS.pt within IN2PAST, ensuring close interaction and synergies among them, promoting

innovative research that combines complementary knowledge and skills from all the consortia disciplines and bringing together expertise, know-how, research capacity and resources.

IN2PAST's strategic partnership with ERIHS.pt infrastructure will enable new research activities and knowledge, engaging audiences, allowing training and supporting the development of public policies by bridging the specialised expertise of all institutions, going beyond the simple access to ERIHS.pt state-of-art instruments from HERCULES Lab, LNEC and LJF.

B. Strategic Plan

B.1. Introduction

IN2PAST, Associate Laboratory for Research and Innovation in Heritage, Arts, Sustainability and Territory, is dedicated to the preservation, study and promotion of cultural heritage, generating intensive collaborative relations between: 1) academic, laboratory-based, theoretical and empirical research; 2) public policies concerning the domains of cultural heritage, arts and civic memory; 3) an important set of Portuguese cultural institutions and facilities, namely monuments, museums, archives, archaeological sites and natural parks.

The creation of IN2PAST thus contributes to the effective implementation of a national strategy for science and technology, particularly in regard to the 'R&I Agenda for Culture and Cultural Heritage'. As the Agenda states, it is necessary to create an «an instrument of interaction and articulation between researchers and R&D units, administrative entities, social agents, and companies focused on responding to societal challenges».

Often divided by type of facilities or disciplinary fields, the study and promotion of cultural heritage finds in IN2PAST a perfect institutional environment, encouraging the establishment of links between tangible and intangible (including digital) cultural heritage. Bringing together scientific areas often set apart by academic tradition, IN2PAST extends its operations from laboratorial innovation in the field of heritage sciences to the design of public policies of collective memory, favouring the emergence of an integrated vision with the related partners and stakeholders.

The current institutional structure of the Portuguese state in matters related to cultural heritage is organised around a set of fundamental pillars:

Urban buildings, architectural and archaeological heritage; mobile heritage; intangible heritage; museums and monuments — all of these fall under the scope of the Directorate General for Cultural Heritage (DGPC) and the Regional Directorates of Culture (DRC). Additionally, linking cultural heritage and the conservation of nature, there are the natural parks and protected landscapes under the authority of the Institute for Nature and Forest Conservation (ICNF) and the Portuguese Environment Agency (APA).

The arts (including dance, opera, choral and symphonic music), are under the authority of the Organism for Artistic Production (OPART); film and related activities, falling under the Portuguese Cinematheque or the Institute for Cinema and the Audiovisual (ICAM); and, under the General Directorate of Arts (DGArtes), the several dimensions of the promotion and qualification of artistic creation as well as its display and access.

The documental heritage that is representative of Portuguese history and culture is a responsibility of the National Library of Portugal (BNP); the archives and integrated policies for books, libraries and reading fall under the Directorate General for Books, Archives and Libraries (DGLAB). Finally, the public policies of national collective memory, including historical commemorative programmes, are direct initiatives of national political bodies, such as the Ministry of Foreign Affairs, the Government, the Parliament, or the President of the Republic.

IN2PAST has the goal of strongly engaging with all these pillars, their institutions and their authorities. It also aims at a highly cooperative and co-productive relationship with local, national and international facilities and organisations. Therefore, the constitution of IN2PAST provides the Portuguese state, at its various levels, with a unique scientific, cultural and institutional capital to support and assess public policies in all matters related to cultural heritage.

Simultaneously, this LA offers society — from local institutions, companies, associations and schools to media companies — exceptional resources for the development and implementation of their own strategies. In this sense, IN2PAST also positions itself as an operative element in the design of public policies and their dissemination to different social stakeholders.

IN2PAST's operative layout will be developed through its five Thematic Lines (TLs), whose main areas of intervention we present below, ranging from specific projects to be developed in the first five years of activity to more steady partnerships for the next decade. Through this project, IN2PAST aims to decisively contribute to the response to several scientific, cultural, environmental, and economic challenges that both Portugal and Europe will face in the near future.

B.2. Thematic Lines

TL1 | Science and Technology for Cultural Heritage (Coordinator: José Mirão)

Cultural heritage plays a central, social and political role in regional sustainable development and can be a vector for promoting diversity and social cohesion. Moreover, it is a significant element in the identification of citizens with nations, regions and communities, bestowing upon them a sense of belonging. Cultural heritage comprises different cultural expressions of identity and their access, authenticity and diversity are differentiating elements and drivers of economic activities such as tourism and creative industries. In this context, it is essential to preserve and debate the authenticity of cultural heritage's various expressions and enhance these legacies, underlining their role in the cultural identity of the territories and projecting them as a basis for economic activities.

Heritage research must be based on multi- and transdisciplinary approaches that create dynamics and synergies between the humanities, social sciences, and natural sciences. Moreover, the preservation and the valorisation of cultural heritage are fundamental issues that require the implementation of integrated strategies vis-à-vis the production of new knowledge, the transfer of knowledge to make it socially useful and relevant, and the dissemination to raise awareness and value such knowledge. In this context, the importance of craft heritage and traditional methods of manufacture using local natural resources is not a minor issue, given the threats posed by industrial, less sustainable alternatives and long supply-chains, which can put on the market products of dubious origin, compromising the authenticity of crafts. Therefore, the revitalisation of craft heritage by the introduction of innovative processes, novel and improved materials or new uses is of fundamental importance for low-density territories.

In a similar way, the preservation of intangible cultural heritage is urgent, namely when stored on fragile physical supports that depend on specific technologies and/or formats quickly becoming obsolete as a consequence of the acceleration of technological evolution. Moreover, the preservation, documentation and accessibility to intangible cultural heritage documents, including cultural and artistic performances and political and social events recorded only on magnetic tape or photographic supports, is crucial to our collective memory as a society.

The nature of some cultural heritage makes imperative the inclusion of the methods and techniques of physical and life sciences in the interdisciplinary study of tangible cultural heritage. This can only be possible through the contribution of all of IN2PAST's RUs, especially of its unique laboratory hubs, namely HERCULES Laboratory, Laboratory of Construction and Technology at the School of Architecture (LAB2PT) and the emerging Digital Humanities Lab (IHC).

Therefore, TL1's envisaged contributions to public policies can be summed up into:

- a) Development and implementation of the best conservation-restoration and preventive conservation practices and risk assessment strategies required by a sustainable use of cultural heritage, in a dynamic framework that includes the pressure of tourism and climate change.
- b) Valorisation of traditional regional products and methods, in their aesthetic motives and technical-material characteristics, creating authenticity indicators and developing new aesthetic and technical proposals based on sustainable traditional methods, materials and products.
- c) Continuous appraisal of Portuguese cultural heritage, including shared heritage of Portuguese influence in the world as an essential pillar of our local and national collective memory and as a way of understanding past societies, their transformations and the use of resources in the territories

These major achievements will be developed in the collaborative work environment provided by the IN2PAST LA. With regard to the ensuing public policies, some specific actions can be anticipated, and obstacles prevented.

Contribution c) will entail collaboration between natural science researchers such as chemists, geologists or physical anthropologists and archaeologists, architectural historians (e.g. from LAB2PT or CHAIA) or art historians (from IHA). The combined use of innovative analytical methodologies (i.e. isotopic and trace element analysis) and approaches from the humanities or social sciences to the historical/archaeological objects will reveal the relation of ancient societies with the territories and available resources. This is especially important when the objects mark the presence of Portugal, and its peoples, in the world, in different time periods.

The strategy outlined in b) is vital to local economies with significant tourist flows and to global sustainability through the use of improved traditional methods and materials. The touristic attractiveness of some regions does not always provide new incomes to local artisans. Therefore, it is important not only to value the use of traditional methods and materials, but also to create new aesthetic proposals and to introduce or develop novel or improved materials and techniques. This requires a multi-disciplinary approach with the intervention of material and natural scientists, engineers, architects, art historians, and designers (e.g. from the Design Institute of Guimarães – LAB2PT), as well as ethnographic knowledge provided by anthropological research. The touristic gaze and climate change present new challenges to cultural heritage preservation. Therefore, as stated in contribution a), IN2PAST assumes as a primary task the development and implementation of better conservation-restoration and preventive conservation practices and risk assessment strategies. These comprise the identification of the materials and of their degradation processes. Such multi-disciplinary approach should involve conservation and digital heritage scientists, conservators, art historians, musicologists, audio specialists (e.g. from CESEM) and curators. Major monuments and masterpieces (e.g. Panels of St. Vincent, Almada Negreiro's Mural Paintings at Lisbon's Gares Marítimas) will be studied. The perennial historically relevant materials of textual, graphic, audio-visual archives (e.g. Calouste Gulbenkian Foundation's audio archives) are particularly challenging. Climate change will influence the indoor microclimates and constrain degradation processes of built heritage, emphasising the general need for the development of low-cost monitoring and risk assessment solutions for heritage curators. The digitalisation technologies of monuments must be fused with the Building Information Modelling (BIM) approaches to generate large digital representations that allow assessing and managing the risk of these sensible constructions.

TL 2 | Landscapes, Territories and Cultural Heritage (Coordinator: Manuela Martins)

This thematic line of research and action revolves around a common interest for the study of the territory, its landscapes and heritage, which are understood as the material, spatial and cultural expressions of societies over time. Interpreting cultural heritage as a proactive resource, IN2PAST articulates heritage with development through innovative geographical methodologies towards the territory.

Promoting fundamental and applied research, this TL thrives from the interdisciplinary composition of the different RUs units gathered at IN2PAST. Researchers' skills and installed laboratory capacity will be used for the analysis, understanding, and interpretation of territories and their natural and cultural landmarks, assumed as heritage resources that can and should foster economic and social development. Such diverse disciplinary expertise generates an internal network of human resources, which is a valuable tool to promote the scientific quality of projects and results around the thematic axes of this TL:

- 1) Environment and land uses;
- 2) Urban forms and societies;
- 3) Building cultures and practices;
- 4) Imagery, representation and communities.

These four axes come together to work under the strategy of heritage enhancement and innovation for development. The broad understanding of landscapes includes different yet concurrent interpretations, from natural to the built environment and soundscapes. Indeed, the interaction between nature and societies is critical, surpassing the fixed opposition between nature and culture and fostering a holistic perception of cultural heritage.

Building cultures are a fundamental component of cultural heritage, with their sedimentation processes, their visual impacts, and social contexts. Both erudite and vernacular architectures constitute targets for this TL, spanning over the entire chronological frame, from early settlements and archaeological sites to contemporary geographies of culture. Projects include:

- a. The enhancement of the Archaeological Area of Carvalheiras, in Braga, ruins of a quarter dating back to the Roman period; ultimately, this project seeks to foster the creation of an organised cluster of archaeological museum sites in the city;
- b. The study of Archaeology Landscapes in Late Antiquity and the rural exploitation of the Alentejan Antiquity territory at Pisões;
- c. To map, survey, study and analyse early-modern urban and built contexts in Portugal and along the Atlantic and Indian ocean's coasts, aiming at influencing public policies of preservation and knowledge in a post-colonial world;
- d. The study of Portuguese noble residences combining the landscape/territory of their inscription, the buildings proper and their decorative programs;
- e. The study of the ducal village of Vila Viçosa, including its various constructed components and soundscape;
- f. Contemporary architectural interventions in industrial heritage, such as Arquinho Factory, in Guimarães, with new uses, applying a research for design methodology within the Study Centre of the School of Architecture;
- g. The set of a critical itinerary of Portuguese vernacular architecture, based on mid-20th century surveys, for a preservation of heritage grounded on participative methodologies;
- h. The study and rehabilitation of modern built heritage in the former Portuguese African colonies, pursuing the ongoing funded Getty project of the Beira train station in Mozambique;

i. The application of Malagueira to the National Tentative List for UNESCO, together with other works by Álvaro Siza Vieira.

These projects will be joined by a broad and long-term debate around imagery and representation, where approaches from social sciences, the humanities, and arts play a fundamental role. Prospective studies comprise:

- a. The intangible cultural heritage regarding nature, where ethnography can be used to research memories regarding human/non-human coexistence and memory;
- b. The analysis of imaginaries and the patrimonialisation of nature, integrating processes of rewilding and landscape archaeology and environmental history in close relation with the communities;
- c. The 'cartography' of industrial Ave valley landscape, which requires a multidisciplinary approach in order to find innovative solutions for a sustainable development of the region;
- d. The patrimonialisation of the soundscape of Évora from 1540 to 1910, aimed at the study of urban aspects regarding music activity in religious and public buildings and at the dissemination of new data through digital platforms;
- e. Work on the Laboratory in the Landscape of the Zezere's Water Basin.

In addition to these specific projects, this TL will promote the creation of an Observatory for Cultural Heritage and Tourism. This latter initiative is fundamental to measure the impacts of cultural heritage and its classification associated with social well-being, including aspects related to quality of life, social inclusion, educational benefits, and other cultural and social features. Such activity will provide systematic and digital material for the assembly of big data on the past, a repository on past landscapes and cultural heritage as digital agenda for open-access metadata (cartographical, statistics, historical documents, surveys) to be disseminated among management authorities or bodies and in open-access networks.

TL3 | Museums, Monuments and their Collections (Coordinator: Alexandra Curvelo)

Individual and collective research projects developed by IN2PAST's researchers have contributed to the making of policies, governance, curatorship, management and conservation of tangible and intangible heritage in all forms, as well as timely scientific advancement and education that will secure future generations' awareness of the need to care for and preserve heritage. These concerns have motivated many initiatives co-produced by IN2PAST researchers and other institutions, namely museums. The competence of IN2PAST's team to devise applied research and collaborative initiatives with museums is demonstrated by several ongoing projects, such as the History of the Calouste Gulbenkian Foundation's Art Exhibitions—Digital Catalogue; PALAMUSTO — Research and Training for the Palace Museum of Tomorrow; the institutional cooperation of IHC with the new National Museum of Resistance and Freedom (in Peniche); or the nomination of IN2PAST researchers to the Board of Museusm, namely the Neorealism Museum, in Vila Franca de Xira, and the National Museum of Ancient Art, in Lisbon, whose directors are members of IHA and CHAIA, respectively. In the next decade, the comprehensive competence of IN2PAST's team equips will face new challenges. The digital turn, "touristification" or even the pandemic emergency demand a reconfiguration of how heritage is displayed and consumed. Museums — but also monuments — are fundamental to this reconfiguration. IN2PAST recognises the potential for intervention in museums through the development of interdisciplinary projects guided by the intent to democratise access to culture and express its regional, ethnic, and religious diversity. IN2PAST will develop collaborative

initiatives with academic institutions, tutelary bodies in museums, monuments at central, regional and local levels, municipal entities, private entities in the business sector, community associations and other entities or representatives of local social groups, with the due respect for diversity and for issues of ethics and intellectual property, as substantiated by the scientific capital and experience in citizen science of the LA team.

In the upcoming five years, projects and partnerships will be developed along the lines of the Museums of the Future (by Mu.SA, Museum Sector Alliance) Project Group's preliminary report:

- Contribute to counter the current territorial and social asymmetries that exist within the museum network by means of collaborative museological projects to promote cultural diversification and geographical coverage, as it is being done (and will continue to be) by IHA researchers in cooperation with Laboratório de Artes na Montanha Graça Morais and the CIAJG—Centro Internacional das Artes José Guimarães, with which ICH and CRIA researchers also collaborate in the study of artists' private collections of ethnographic artifacts;
- Contribute to the integrated knowledge and education by developing projects and using museological collections to highlight, by means of exhibitions and debates, the multidimensionality of heritage (in the context of the PALAMUSTO project, the Erasmus+ Master Degree 'History in the Public Sphere' (IHC); and the H2020 MSCA ITN 'Critical Heritage Studies and the Future of Europe' and FCT PhD project in Anthropology 'Politics and Displays of Culture and Museology', with the participation and coordination from CRIA, respectively);
- Critically assess the practices and technologies for the assembly, collection, classification, preservation, exhibition, and commodification of archaeological, historical, ethnographic, artistic, natural human and non-human artifacts, objects and expressions, thus stimulating public debate about the ethics and intellectual property rights underlying their selection, circulation and access, in order to respect fundamental principles of human rights and democratic governance. In this respect, IN2PAST gains from its researchers' longstanding collaborations with several National Museums (Ethnology, Natural History and Science) regarding their national and colonial artistic, ethnographic and naturalist collections, thereby developing the study of restitution and devolution practices.

Concerning monuments, this line will contribute to:

- The safeguarding and enhancement of architectural and landscape heritage by preparing studies on its multiple dimensions, capitalising IN2PAST's interdisciplinary competence and laboratory capacities;
- The strengthening of national and European itineraries of architectural and archaeological heritage and the development of international policies, providing proposals expressly designed to promote greater multicultural inclusion and social development; this will be done by highlighting as privileged arenas the routes to religious and industrial heritage and incorporating in their co-creation and management related social groups such as workers or miners, ethnic and religious communities (e.g. the enhancement of the Archaeological area of Carvalheiras and the creation of a cluster of archaeological museums in Braga).

The concern with educational and cultural democratisation will lead our action, in close articulation with IN2PAS's New Publics and Communication Office, while also fostering the inscription of these tendencies at the heart of DGLAB and DGPC policies and interventions. Specifically, IN2PAST's

scientific knowledge and training expertise responds to DGPC strategic policies in professional valorisation, museological revitalisation, conservation-restoration investments and the reinforcement of plural and inclusive Thematic Itineraries and Contemporary Art collections. It should be noted here that DGPC already collaborates with IN2PAST's RUs (such as CRIA, which is a consultant NGO for the UNESCO Convention for the Safeguarding of Intangible Cultural Heritage and part of Working Group for the Intangible Cultural Heritage of the Portuguese National Commission for UNESCO). Overall, this TL responds to cultural heritage public policies in its mission and goals. But it also tackles broader societal challenges, contributing to other public policies, most notably regarding migrations and social integration or regional development, while addressing the values stated in the National Plan for the Arts (Culture and Education Ministries) — democratization of access, cultural diversity, creativity, reflexivity, and inclusiveness.

TL4 | Archives, from Preventive Preservation to Digitalisation (Coordinator: João Pedro d'Alvarenga)

An archive, as a collection of materials of historical relevance, or the place or site where those materials are kept, is a proper memory institution. Likewise, other institutions that collect and catalogue materials, old and new, such as libraries and museums, are memory institutions as well. Memory institutions and the objects, physical or digital, they collect and itemise, broadly understood as archives, are the focus of this fourth TL.

Research within this TL will address the pressing concerns about memory institutions stemming from transversal problems related to both preservation — including the crucial selection of memory objects, conservation (especially preventive conservation) and restoration of materials and contents — and access, in order to advise on criteria for public policies and ethics in this area. Textual, graphic, audiovisual and mixed materials — which are the traditional categories in physical archives — and other cultural artifacts are massively being transferred into digital objects. Digital presentation of material and intangible heritage facilitates access and reading of single works in a contextual way. The partnership between twenty-two Portuguese public cultural agents and Google Arts & Culture for the creation of the platform Portugal: Art and Heritage, where, to the present date, more than three thousand objects of Portuguese heritage are already available, is an encouraging example of a universally, potentially democratic, fast, and contextualised access to culture and cultural products, contributing to the configuring of a national identity within the globalising web world. Research efforts within this TL will promote large-scale use of preventive conservation of physical archival objects (see TL1) and of digitalisation as an effective means for preservation, restoration (when needed), storage, and facilitated access through metadata management and interoperability. TL4 will foster the development, in cooperation with HERCULES Lab, of techniques for the restoration and reconstruction of damaged archival objects using cutting-edge digital tools, particularly image treatment software, allowing the recovery of their textual and/or graphic contents without handling the physical fragile object.

Benefiting from these and other technical skills, for the next five years, IN2PAST will consolidate several projects and implement new ones with the support of HERCULES LAB, as well as the emerging Digital Humanities Lab (IHC):

The safeguard, digitalisation and promotion of collections' availability, including the estate (documents, manuscripts, sketches, and library) of the artist José de Almada Negreiros, deposited at FCSH (2020-2021; IHA and others); the personal archive of the protest singer and composer José Mário Branco, also deposited at FCSH (2020; database devised by CESEM online since 2018); the collection of Medieval documents in the Braga District Archive, which will be studied and digitalised in articulation with Gallaeciae Monumenta Historica;

- The Bank of Contemporary Art (BAC), created by IHA in 2015, which aims at cataloguing, studying, preserving and digitally displaying disregarded and, therefore, endangered small archives and personal estates of 20th-century artists, art historians, art critics and galleries (BAC is currently run by the Municipality of Lisbon through EGEAC, with IHA remaining a key partner);
- The accessibility and reuse of recent musical heritage, particularly post-war, by devising a multidisciplinary strategy that articulates musicological, technical, documental, and archival approaches, along with a dedicated lab facility for the restoration of phonograms and magnetic tapes and digitalisation of analogic audio signal (see also TL1). This will also allow the recovery of collections of mostly non-musical audio objects (like the archives of radio broadcast companies) in order to constitute an archive that documents 20th-century soundscapes and complements other historical archives;
- The development of online, open-access, interoperable databases for the description, correlation and display of textual and graphic objects and their contents, expanding ongoing projects, such as the Portuguese Early Music database a resource that offers high-resolution images handled through an IIIF server, descriptions and full indexes of Medieval and early modern chant and polyphonic manuscripts preserved in Portugal and neighbouring Spanish locations, already interoperating within a global network of similar resources;
- The LA will be also a permanent partner and a scientific and technological advisor of Ephemera, an expanding archive (stored in Barreiro) that aims to make available online newspapers, ephemera and documents belonging to José Pacheco Pereira's personal library and archive, which are crucial for the study of Portuguese 20th-century cultural and political life, as already exemplified in the works of many IHC' researchers;
- The contribution to the history of scientific heritage through the incorporation of the personal papers and writings of Portuguese anthropologists, ethnographers, archaeologists, historians, art historians, philosophers and other social sciences and humanities scholars into the Archive of Portuguese Contemporary Culture at the National Library of Portugal.

Through this TL, IN2PAST will continuously cooperate with archival institutions and practices of a very different nature, from national libraries and museums to non-profit associations dealing with text, visuals and sound, including the recently founded National Sound Archive. Simultaneously, IN2PAST will confront those institutions and practices with the usages and ethical implications of material and visual archives, namely the mandatory public display of the collected data (artefacts, specimens, datasets) as a "moral economy of data", and the ethical issues regarding the circulation, access, and digitalisation of archival objects. These are key issues to be considered in the scope of public policies, being defined in the framework of the "Portugal Digital" governmental programme.

TL5 | Cultural Circulation, Public Policies on Memory and Inclusive Citizenship (Coordinator: Rui Lopes)

The last decades brought major transformations to global geopolitics. The Popular Republic of China and other non-western countries gained a new economic role and de-industrialisation increased in the West. Migratory fluxes and the diversification of the origins of the populations in the national territories have contributed to an increase of cultural circulation, demanding a greater problematisation

of the "effects of the diaspora on social identities and memories" ("R&I Agenda for Culture and Cultural Heritage"). In this context, encompassing diplomatic, scientific, and artistic undertakings, this TL seeks to support, accompany, and implement the development of memory policies leading to a more active and renewed global positioning of Portugal and to more inclusive and creative societies. TL5 will operate in three major areas:

- 1) Designing historical commemorations as public policies of the Portuguese state's foreign policy;
- 2) The construction of migrants' archives as a public policy towards pluralistic collective national memories;
- 3) The promotion of state policies that will address so-called difficult memories, ranging from ongoing work on the memory of the Holocaust to the remembrance of the colonial era.
- 1) The Portuguese state has used commemorations as an instrument in matters of foreign policy and for the genealogy of modern citizenship in Portugal. The celebration of the 500th anniversary of the discovery of the sea route to India and of the 100th anniversary of the establishment of the Portuguese Republic, under the tutelage of entities such as the Comissão Nacional para a Comemoração dos Descobrimentos Portugueses and Comissão Nacional para as Comemorações do Centenário da Républica, brought together academia and political power. In the upcoming decade, IN2PAST will support and accompany the Portuguese state in the design and implementation of commemoration programs concerning the 200th anniversary of Brazil's independence (2022), the 50th anniversary of the independence of African countries that were under Portuguese colonial rule (2023-2026), the 50th anniversary of the Carnation Revolution and of the current Portuguese constitution (2024-2026) and the 40th anniversary of Portugal's accession to the then-EEC (1985). Along with major state initiatives, commemoration efforts will acknowledge cultural projects endorsed by the associated Rus —the transference of Amílcar Cabral's archive from Lisbon to Guinea-Bissau and Cape Verde and its installation and preservation (IHC); or CESEM's research and its current cooperation with Instituto Camões in Brasília to recover the musical works of King-Emperor Dom Pedro (IV of Portugal, I of Brazil).
- 2) Through partnerships with local associations and foreign branches of the Portuguese government, this TL will work towards the production of collective memory (including the creation of new archives) among migrant communities of Portuguese origin, with a focus on the French, Brazilian and North American contexts. In the wake of several FCT-funded research projects, TL5's work aims not only to inscribe past emigration in the Portuguese collective memory, but also to contribute to reinforce an inclusive citizenship in the contexts of destination. At the same time, and in line with ongoing initiatives such as the CHAIA's Startups project, funded by the Aga Khan Foundation, IN2PAST will work to value traditional artisanal practices and repertoires (such as practical knowledge on food and rituals, among others) from the countries of origin of immigrant populations, including, with particular acuteness in recent years, those with refugee status. The same goal will be developed in the field of music by fostering debate on the artistic appropriation of the past and endorsing public initiatives towards creative citizenship. On the one hand, great emphasis will be given to research on traditional, multiple or transnational identities in connection with the development of audiences and creative performance practices; on the other hand, the LA will become a close scientific and cultural partner of two major musical festivals, the annual Festival Músicas do Mundo taking place in Sines since 1999 and organised by the city's Council, and the Festival Imaterial: Património, Pensamento e Residências, to be held annually, starting from 2021, in the framework of Évora's application for the European Capital of Culture 2027.

3) This TL's third major area focuses on the need to deepen and promote knowledge regarding historical processes (from World War II to colonial wars) whose violence poses particular challenges to the construction of a collective memory. Against the background of a Europe in which several factors have combined to favour the rise of racism and xenophobia, including in electoral politics, among other projects, IN2PAST will continue current work in terms of inscribing the Holocaust in the European peoples' collective memory (see the following section, below). In the footsteps of IHA and CRIA's research, it will also promote the study and thoughtful debate on matters such as public art and historical memory, focusing on issues like the contested memory of European empires. Along the same lines, IN2PAST will address the debate on the ownership of cultural artifacts and artistic works from colonial contexts, an issue that has already been an object of dialogue between different national states, particularly following the initiatives of the French state in 2017. Likewise, following the appeal of ICOM Portugal, TL5 will contribute to the inventory and study of the origins of the colonial collections, engaging with archives and photographic collections deposited in museums such as the National Museum of Ethnology (including the estates of Jorge and Margot Dias, Ruy Cinatti, and Michel Giacometti) while fostering the study of methods of restitution of copies of their materials to their original provenance.

Throughout these three main areas, TL5 will involve various institutions with which there is a reack-record of partnership and collaboration — from the Instituto Diplomático (ID) of the Portuguese Ministry of Foreign Affairs to the Évora City Council, encompassing also such diverse entities as the Jewish Museum of Lisbon and the Association Mémoire Vive/Memória Viva — and will also contribute to the broadening of scientific knowledge of the past and the promotion of historical culture.

B.3. The Five Cases

The following five cases of cooperation between research and innovation are exemplary of IN2PAST's great potential, ranging from scientific and technological contributions towards the study and safeguard of cultural heritage to the implementation of public policies of memory towards inclusive citizenship. They also highlight the pertinence and potential of each of the five TLs presented above.

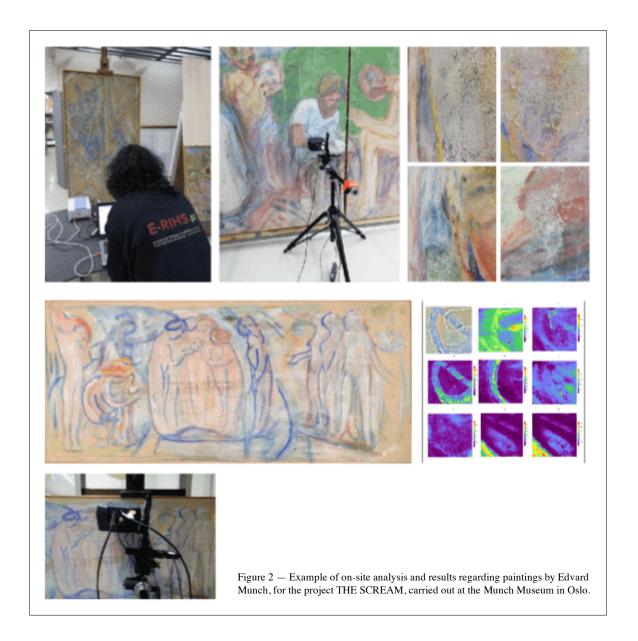
1. Research Networking and Teaming: The Coordination of ERIHS.PT

HERCULES Laboratory established from the beginning a strategy of networking and development of partnerships, aimed at excellence in heritage research. With this goal, the Lab assumed, in 2012, the scientific coordination of the José de Figueiredo Laboratory (LJF), the central Government laboratory for conservation and restoration, ensuring that all conservation and restoration interventions in pieces of the National Treasury and National Museums are carried out with scientific supervision and analytical support. In 2015, this partnership was reinforced with the integration of the National Civil Engineering Laboratory (LNEC) in the ERIHS.pt consortium (Portuguese Platform for European Infrastructure in Heritage Sciences / Portuguese Platform of the European Research Infrastructure in Heritage Science). The ERIHS.pt infrastructure would become one of the infrastructures of the National Roadmap for Research Infrastructures of Strategic Interest (RNIIE) through a competitive tender promoted by FCT, to guarantee the access of the scientific community and stakeholders in the area of heritage safeguard and management to its laboratory infrastructure, the mobile laboratory and

its scientific skills. The integration of ERIHS.pt in the RNIIE and its constitution as a foundational pole of the European infrastructure E-RIHS — European Research Infrastructure for Heritage Science was fundamental for its integration in the ESFRI roadmap (European Strategy Forum on Research Infrastructures) in May 2016, thus affirming a leading role in heritage science for Portugal. The integrated structure of ERIHS.pt has enabled an increase in the impact and involvement of partner institutions with stakeholders, allowing a greater performance in the field and the development of copromoted projects, at the regional and national levels, and its internationalisation. As a national infrastructure, ERIHS.pt launched two competitive tenders for access to its fixed infrastructure (PT-FIXLAB — composed of several laboratory analytical resources provided by partners) and the mobile laboratory (PT-MOLAB — composed of portable instrumentation and centred on the unit Laboratory of HERCULES), the first in March 2018 and the second in March 2019, having granted a total of 23 accesses to PT-FIXLAB and 27 accesses to PT-MOLAB. The third call that was scheduled for March 2020 was postponed due to the COVID-19 pandemic and is now scheduled for the end of 2020. The IN2PAST associated RUs CHAIA, IHC, and IHA have participated in joint projects under this framework. In this way, and since its creation, the ERIHS.pt infrastructure has contributed significantly to the national scientific and technological development, not only through access to its infrastructure, providing the scientific community with cutting-edge analytical instrumentation in areas as diverse as archaeometry, conservation, and valorisation of movable and immovable heritage and artistic studies, but also through the use of infrastructures by young researchers, including master's and doctoral students, as well as through innovative solutions for heritage, including new materials and products and biotechnological solutions. With regard to internationalisation, the ERIHS.pt participated in numerous projects, such as the Old Goa Revelations Project (2019-2021), funded by the Calouste Gulbenkian Foundation, a collaborative project with the Archaeological Survey of India — Science Branch intended to develop tools for the interpretation of Indian and Portuguese shared heritage, using as case study the Viceroys Portrait Gallery. The results obtained through this study are supporting the definition of conservation and restoration intervention methodologies and the creation of a museographic discourse that allows a new interpretation of the collection. This project was in the diplomatic agenda of President Marcelo Rebelo de Sousa during his last visit to India, in February 2020.



Figure 1 — Snapshots of on-site analysis during 3 visits of the ERIHS.pt infrastructure to a) Spain's National Library (Madrid); b) Misericórdia da Lourinhã; c) Palácio Nacional de Mafra.



2. Rehabilitating the Convent of São Francisco: A Holistic Approach to the Ruin

The rehabilitation of the former Convent of São Francisco de Real in Braga enabled a perfect set for a holistic approach towards the ruin, its study and process of conception, and development of contemporary architectural design. Between 2016 and 2020, this project's main purpose was to install the Unit of Archaeology of the University of Minho and an exhibition circuit in the ruins of a former convent, which included a pre-Romanesque structure and an Early-Modern monastic building. Therefore, a transdisciplinary work was carried out, combining a rigorous archaeological survey and study with a prospective architectural interpretation. Both disciplines provided fertile research to support the intervention in a built complex with a high heritage value and significance to the community. The Study Centre of the School of Architecture of the University of Minho was in charge of the design, taking advantage of a sustained experience in working in heritage-charged contexts, such as the urban requalification of the Toural area in Guimarães for the European Capital of Culture 2012.

Both the Unit of Archaeology and the Study Centre, articulated within the LAB2PT, worked under the procurement of a partnership between the UM and the Municipality of Braga, engaging with different actors and agents: senior scholars and junior researchers and designers within the sphere of LAB2PT, policy decision makers at the local and regional level, and the civil society, particularly the Archdiocese of Braga and the local community. Clearly embedded in the 'Culture and Cultural Heritage' thematic agenda, the preparation of this project combined research-based criteria for a meaningful heritage intervention with the bridging of past and contemporaneity.



Figure 3 — Convent of São Francisco

3. The Colours of Batalha: An Interdisciplinary Project

The interdisciplinary project 'Monumental Polychromy: Revealing Medieval Colours at Batalha' (September 2016 – August 2017) was initiated as a seed project by IHA, with the aim of studying and virtually reconstructing the original polychromy of the 15th century royal pantheon known as the Founder's Chapel at the Monastery of Batalha. Led by IHA's Joana Ramôa Melo, the project identified to what extent, in what ways, and for what purposes was colour applied to the architectural structures and funerary monuments of the chapel. The material evidence of the use of colour was considered in the light of current scholarship on the heraldic and decorative significance of such use. The project thus pioneered a new field of research in Portuguese art history in close collaboration with other scientific disciplines; its implementation involved new cooperative methodologies with research partners in chemistry and physics (HERCULES Lab), information technology (Instituto Politécnico de Leiria), heraldry (Instituto Português de Heráldica) and heritage (Monastery of Batalha). The project's

novelty value and focus on the transfer of knowledge to society attracted further funding from the Calouste Gulbenkian Foundation, which allowed a more thorough sampling of original pigments and a more accurate virtual rendition of the royal chapel's 15th century polychromy. The knowledge resulting from this joint research was widely shared through a variety of outputs — from conference presentations and a master's dissertation to features in general and social media outlets — with a view to ensure its dissemination both within the academic community and society at large. On this case, see the TV documentary in RTP2 Visita Guiada, 17 September 2018 (https://bit.ly/3mB9xMu).



Figure 4 — Coverage of the project at National Geographic Magazine (Portugal).

4. National Palace of Mafra: From the Restoration of the Organs to a UNESCO World Heritage Site

On 7 July 2019, the National Palace of Mafra — the Royal Building of Mafra, comprising the Palace, Basilica, Convent, Garden, and Hunting Park — was inscribed as a UNESCO World Heritage Site. Shortly before, on 27 March of that same year, by joint initiative of the Directorate General for Cultural Heritage, the Municipality of Mafra, and UNL, a hub for musicological research with the participation of CESEM and INET-md was established there, in connection with the organs and the carillons in the Basilica, the Palace's musical library and archive, and the collections of the National Music Museum, which will be installed in the Palace in 2021. The institution of the new research facility is the result of the long-term involvement of CESEM, both institutionally and through its researchers, in activities in the Palace and Basilica. In 1998, João Vaz, who subsequently joined CESEM as a full researcher, took the job of a permanent consultant for the restoration of the six historic organs in the Basilica, which was concluded in 2010; his technical and musicological insights into the process, as seen in many reports, decisively contributed to the overall quality of the

restoration, to which the UNESCO Executive Summary refers in its "statement of authenticity". Since then, Vaz assumed the artistic direction of the Series of Concerts for Six Organs (more than 100 concerts performed to date) as well as the Mafra International Organ Festival (since 2017) and has also been a member of the jury for the International Composition Contest for the Organs of Mafra (four editions since 2013). David Cranmer, also a full researcher of CESEM, organised and directed the former Mafra Music Festival (1997-2001) and has since edited and recovered for performance several musical works in the Palace's library, and written about its composers, especially Marcos Portugal. In the regular series of concerts since 2010, many works specifically composed for the organs of Mafra were given first modern performances, the scores of which were recovered and edited at CESEM. CESEM also organised and has been cataloguing the musical archive in the Palace's library since 2017 and an ongoing catalogue is online since 2019.

The recent Mafra Carillon Festival, in 2020, on the occasion of the inauguration of the restoration of the carillons was co-organised by CESEM, under the scientific direction of Manuel Pedro Ferreira and David Cranmer. CESEM's technical and scientific consultancy for the National Music Museum is provided for in the Memorandum signed in 2019 between the Ministry for Culture, the Mafra Municipality and UNL.



Figure 5 — View of two of the organs of the National Palace of Mafra

5. The Portuguese National Program on the Memory of the Holocaust

The project 'Portuguese in the Mauthausen Concentration Camp (1938 -1945)' (2020-2021), funded by the Portuguese Ministry of Foreign Affairs, has proved to be an invaluable opportunity to positively and transversely influence public policy around Human Rights. With the coordination of Cláudia Ninhos (IHC), the project aims to understand the identity, origin, age, profession and workplaces, as well as social, professional or political paths, living conditions, type of work, death, escape, liberation

or the return of the Portuguese who passed through the Mauthausen Concentration Camp. With a similar research agenda, the IHC saw its project 'Portuguese and Spanish Forced Labourers under National Socialism: History, Memory and Citizenship' approved in 2020, also coordinated by Cláudia Ninhos and funded by the programme Europe for Citizens — European Remembrance 2020, which will continue and extend the transnational scope of the research initiated by the project 'Portuguese Forced Labourers in Nazi Germany' (2015-2017). In the latter, funded by the German Foundation EVZ — Erinnerung, Verantwortung, Zukunft (Memory, Responsibility, Future), a multidisciplinary team of researchers coordinated by Fernando Rosas rescued the memories and stories of Portuguese citizens caught by the system of forced labour that supported the Nazi war economy. Anchored in the research and dissemination of knowledge following a research agenda initiated and sustained by the IHC, the Portuguese Council of Ministers launched the 'Project Never Forget -National Program around the Memory of the Holocaust' (Resolution of the Council of Ministers no. 51/2020), with areas of intervention in Knowledge, Education, Institutional Memory and Dissemination, aiming at combating various forms of discrimination, such as anti-Semitism, racism, xenophobia and homophobia. Framed within the National R&I research agenda dedicated to Culture and Cultural Heritage, in particular the topics dedicated to Cultural Transits, Identities and Memories, IHC's research projects around the memory of the Holocaust and forced labour in the III Reich allow for the problematisation of the effects of diasporas in Europe's social identities and memories, which is especially relevant given the current trend of rising xenophobia and racism in European societies.



Figure 6 — Plate at Mauthausen's Wailing Wall, placed on May 2017.

B.4. Concluding Remarks

The current COVID-19 pandemic has shown the fragility of the fields of culture and cultural heritage, structurally deficient and very dependent on tourism, being fundamentally considered as instrumental for the fulfilment of this sector's needs. The vision driving IN2PAST is to make heritage a central player in the sustainable development of our society by making it meaningful, sustainable, and accessible, in a multicultural and ever-changing world, for the benefit of the wider population. IN2PAST brings together a team of world-class researchers from very different disciplinary backgrounds and internationally competitive RUs to develop a new approach into heritage research and to produce new knowledge. Its implementation of integrated research strategies, knowledge transfer, and dissemination will ultimately raise Portugal to the mainstream of European heritage research. This joint initiative is based on shared fundamental concepts concerning cultural heritage, namely the notion that cultural heritage must be understood in its tangible and intangible dimensions, disclosing the cultural and historical meanings rooted within it, and enhancing its role as a driver for social, environmental, and economic changes towards a more sustainable society. IN2PAST's core mission is to become the go-to R&D hub for developing, evaluating and operationalising improved public policies related to cultural heritage. This renewal involves removing cultural heritage from the minor role it occupies in the media agenda and in education, as well as in the design of public policies. The attribution of the title of Associate Laboratory to IN2PAST will be a first step towards this renewal, ushering in what will no doubt become the consortium of reference in heritage research in Portugal, able to promote pioneering transdisciplinary research with a high societal impact. The remaining steps, undoubtedly the most important and challenging, will be taken, in good measure, by IN2PAST itself, through its exemplary strategy, which encompasses concrete projects envisaged by its TLs for the next five years, grounded on the previous experience of the RUs, as described in the five cases of good collaboration developed in the last five years. This expectation is supported by the already demonstrated ability of IN2PAST's researchers to produce nationwide programmatic guidelines in terms of scientific policy and cultural heritage: the '2030 R&I Agenda for Culture and Cultural Heritage' produced at the request of MCTES and FCT, included in its group of experts researchers from the IN2PAST consortium (HERCULES, LAB2PT, CRIA, IHC) and the agenda was coordinated by the scientific coordinator of this application, António Candeias. IN2PAST assumes as a core objective for the next five-to-ten years that public policies in the field of cultural heritage in Portugal prioritise what is advocated in the 2030 R&I Agenda and in the main axes for 2030 recently presented by the European Commission, namely: green technologies and materials for cultural heritage; understanding the effects of climate change and natural disasters on cultural heritage and their remediation; creation of new models of participatory management and sustainability of cultural institutions and museums; exploring the potential of cultural and creative industries as engines of innovation and competition, integrating product design and new materials and processes in the creation of traditional products and giving new uses to traditional materials through their integration in industrial processes; preservation and enhancement of cultural heritage with advanced digital technologies. To achieve these goals, IN2PAST set out the following strategic priorities, taking into consideration the consortium's unique combination of skills and resources:

- Preventive conservation and risk assessment, a principle whose application requires the
 technical and scientific knowledge of IN2PAST's team, knowledge accumulated in laboratory
 practices developed in Évora, but also in Minho and Lisbon following the collaborative
 history existing between the HERCULES Lab and the DGPC laboratories and their tutelage;
- Massive digitalisation to protect, preserve and enhance collections, artefacts, archives, and monuments and increase accessibility to cultural goods, given the challenges posed by the government program "Portugal Digital", but also inscribing the answer to these challenges in

the laws and state organisations, with implications for the functioning of archives and museums under state tutelage and their relationship with communities, as well as an articulation with the European Digital Strategy;

- Expand heritage preventive conservation to new areas, from traditional to contemporary materials and sound, following initiatives such as the creation of the National Sound Archive, by the current Ministry of Culture;
- The establishment of a strong relationship between cultural heritage and tourism, through the creation of an Observatory for Cultural Heritage and Tourism, able to assist in the definition of policies promoting tourism (domestic and international) that is culturally motivated, aiming at the valorisation of local populations and their cultural practices, and at the understanding of the territory as a factor for sustainable development;
- The creation of a permanent state policy regarding the production of Portuguese and European civic memory, which extends from policies to commemorate international historical events to the strengthening of the cultural role of social sectors most vulnerable to the growth of xenophobia and racism, namely migrant populations, both those of Portuguese origin and those who find their destination in Portugal.
- The making of a pluralistic collective memory encompassing the local populations living in less industrialized areas and migrant populations living in metropolitan areas —, a fundamental condition to the coherence of any public policy in complex societies.

The trust on IN2PAST's RUs and recognition of the importance of this flagship consortium for heritage research has been expressed in the support of leading cultural institutions, organisations and personalities, namely: the current Minister of Culture of the Portuguese government, General Directorate for Cultural Heritage (DGPC), Alentejo Regional Culture Directorate (DRCA), Consello da Cultura Galega (Spain), Diplomatic Institute (Ministry of Foreign Affairs), Calouste Gulbenkian Foundation, Culturgest Foundation, Aga Khan Foundation, Eugénio de Almeida Foundation, Millenium BCP Foundation, Amílcar Cabral Foundation (Cape Verde), Centro Cultural de Belém Foundation, National Library of Portugal, OPART E.P.E., National Sound Archive, Ephemera, National Museum of Ancient Art, National Museum of Ethnology, National Museum of Natural History and Science, Portuguese National Commission for UNESCO, Lisbon City Council, CIMAC -Intermunicipal Community of Central Alentejo, CCDR Alentejo - Alentejo Regional Development Coordination Commission, Alberto Sampaio Museum, Palace of the Dukes of Bragança, and Guimarães Castle, Association of Architects, IDEGUI — Design Institute of Guimarães, Landscape Laboratory — Association, Paula Moura Pinheiro (Guided Tour RTP), Lisbon Holy House of Mercy, Sines World Music Festival, IMATERIAL Music Fest — Heritage, Thought, and Residences, Amílcar Cabral Centre for Social Studies (Guinea Bissau), Live Memory (France), and National Institute of Study and Research (Guinea Bissau). All the support letters are accessible at: https://bit.ly/2Txeolz.

C. Organisation and Governance Model

The organisation and the governance model of IN2PAST were designed and conceived under the following principles:

- To ensure efficient governance that respects the institutional and academic principle of collegiality;
- To ensure the coordination between the five TLs of IN2PAST and their relationship with the support and monitoring of public policies in the fields of culture and cultural heritage;
- To combine the autonomy of the associated RUs and the autonomy of IN2PAST' own activity;
- To optimise the territorial dispersion and territorial impact of IN2PAST, benefiting from the
 recent intensification of virtual meeting practices and preserving the strong connection of the
 associated research units and their researchers to the territory of their cities and regions;
- To guarantee the consolidation and sustainability of the scientific and technical careers of the IN2PAST researchers in order to ensure the build-up and critical renewal of excellent scientific and technical knowledge, as well as the quality of science and technology management;
- taking advantage of the scale resulting from the association of the various research units in the AL to enhance their capacity regarding: (i) obtaining international funding and attracting talent on a global scale, as well as obtaining private national and international patronage funding; (ii) the ability to disseminate and promote the scientific activity of the associated RUs as well as their collaboration with museums, archives, libraries, places and monuments, with the aim of engaging with new audiences and of preserving, studying and promoting their collections.

C.1. Organisation

IN2PAST has its own governing bodies (see C.2.) and its research and innovation activities are organised according to five TS. IN2PAST has laboratory infrastructures, two permanent offices and a permanent staff.

Thematic Lines

IN2PAST is organised around five TLs, each of them gathering researchers from different RUs and each with their own coordinator:

- TL1 Science and Technology for Cultural Heritage
- TL2 Landscapes, Territories and Cultural Heritage
- TL3 Museums, Monuments and their Collections
- TL4 Archives, from Preventive Preservation to Digitalisation
- TL5 Cultural Circulation, Public Policies on Memory and Inclusive Citizenship

Laboratory Infrastructures

The activities of the various TLs lines will count on the support of first-rate laboratory infrastructures, namely:

- HERCULES' analytical laboratories, located in Évora at the Vimioso Palace (the Mass Spectrometry Laboratory, the Biodegradation Laboratory, the Hercules mobile: https://bit.ly/3jAHsDr);
- LAB2PT's laboratories, located in Minho (Laboratory of Construction and Technology at the School of Architecture: https://bit.ly/3kFLkEj), the Design Institute of Guimarães (www.idegui.org) and the Advanced Ceramics R&D Lab (www.aclab-idegui.org).

IN2PAST will also benefit from the IHC's recently founded Digital Humanities Lab, located in Lisbon at the Almada Negreiros College (https://dhlab.fcsh.unl.pt/), as well as other small infrastructures located in the same college, namely CRIA's Audiovisual Lab (https://bit.ly/2TDPeS8), CRIA's Biological Anthropology and Human Osteology Lab (https://bit.ly/3mvd3bm), CESEM's Palaeography and Musical Edition Lab (https://bit.ly/31Vj5tZ).

Offices

IN2PAST' permanent organisational structure also includes two specialised offices:

- a) The New Publics and Communication Office (NPCO), dedicated to the dissemination about and promotion of IN2PAST in society, in close collaboration with cultural institutions and with a particular focus on school audiences, promoting informal and non-formal education about heritage and scientific culture;
- b) The International Office (IO), mainly dedicated to attracting European and other international funding and to mobilise talent to apply to the job opportunities created by IN2PAST; to promote IN2PAST's in the major international circuits of private patronage related do Cultural Heritage, Digital Culture and Human Rights.

Staff

IN2PAST will have the following permanent staff for scientific management:

- An administrator, who will coordinate all staff and supervise activities in terms of human resources and financial management;
- A science communicator for the New Publics and Communication Office, to articulate IN2PAST's activities with partner institutions, research units, and society, namely through virtual platforms and social networks; to liaise with schools and other educational institutions. He/she will lead the Office.
- A science manager to be exclusively dedicated to the financial management, articulating work with the funding stakeholders and the Managements Institutions.
- A science manager for the International Office, working directly under the corresponding Vice-President.

Part of the staff will be located in Évora and each RU and Management Institution shall have a liaison officer with the LA. The International Office will be based at UNL, in Lisbon, where the dedicated science manager will work.

Future developments

During the first five years of operations, IN2PAST researchers and consultants will participate in the activities of the several PhD and Master programmes headed by the different RUs. After the fifth year, IN2PAST will create its own PhD Programme in Heritage, Arts and Memory Studies. From then on, the PhD students will have a representation in the Governing Bodies of the LA.

C.2. Governing Bodies

IN2PAST's governing structure will be detailed in an internal by-law document, to be approved when the activity of the LA begins. The following governing bodies are planned: a Scientific Council, a Board of Directors, a Supervisory Board, an Internal Evaluation Committee, an Ethical Commission and a Public Council.

Board of Directors

The Board of Directors will be presided by the Scientific Coordinator of IN2PAST. The Board will manage daily administration and will be directly responsible for the execution of IN2PAST' career development plan, as well as the liaison between IN2PAST and the Portuguese Government, its main partners, the Deans of the management institutions and the coordinators of the associate RUs.

The Board also includes four Vice-Presidents with specific responsibilities: 1) Supervising and managing the International Office; 2) Coordinating the TLs and their coordinators; 3) Supervising the NPCO; 4) Liaising with the postgraduate training programmes of the associated research units.

The Administrator participates in the meetings of the Board.

The Board shall never be composed of more than one member of each RU. Members of the Board shall not be, simultaneously, members of the RUs' Boards. Twice per year, the Board shall meet with the boards of the RUs.

Scientific Council

The Scientific Council is composed of all the IN2PAST' researchers holding a PhD.

The Scientific Coordinator and the other members of the Board of Directors will be elected by the members of the Scientific Council every three years. In the first six years, the Scientific Coordinator will also be a member of HERCULES.

The Scientific Council shall meet at least twice per year.

The Scientific Council shall approve their own statutes and provide an opinion on the LA's annual budget, plan and report.

The Scientific Council will elect the coordinators of the TLs.

The Scientific Council will have a Coordinating Committee of three elements, to be elected by the Council, and that shall not be simultaneously members of the Board of Directors.

The Coordinating Committee includes the President of the Scientific Council, who shall not belong to the same research unit as the Scientific Coordinator and President of the Board of Directors.

All electoral procedures that take place within the Scientific Council shall be regulated in order to promote gender equality.

Supervisory Board

The Supervisory Board is composed by a President and a Vice-President, both elected by the Scientific Council, and includes also a statutory auditor to be designated by the same Council.

The elected members of the Supervisory Board shall not be simultaneously members of the Board of Directors or the Coordinating Committee of the Scientific Council.

The Supervisory Board will be responsible for:

- Examining the accounting;
- Following the execution of the plan of activities and budget;
- Issuing opinions about the financial and equity management instruments;
- Reporting to the competent entities any irregularities it may detect;
- Executing all tasks attributed under the law and issuing opinions about all matters that may be submitted by the AL's governing bodies.

Internal Evaluation Committee

The Internal Evaluation Committee performs evaluation and advisory functions.

It is composed by selected external experts and personalities, with recognised scientific competence in the area of activity of IN2PAST and working on foreign institutions.

It is responsible for regularly analysing IN2PAST's functioning and issuing the opinions it deems appropriate, namely on the plan and the annual activity report.

It shall be composed of five to seven members.

The Internal Evaluation Committee will be nominated by the Scientific Coordinator, after consulting each one of the associated RUs.

The Internal Evaluation Committee has a five-years' mandate and meets once per year.

For the first five years of operations, the IN2PAST Internal Evaluation Committee will be composed by the following personalities: Barbara Kirshenblatt-Gimblett (Emerita Professor of Performance Studies, New York University), Hilde Heynen (Full Professor, Department of Architecture, Katholieke Universiteit Leuven), Ewa Domanska (Professor of Human Sciences, Adam Mickiewicz University at Poznan & Stanford University), Francesc Cortès Mi (Full Professor, Music, Universidade Autónoma de Barcelona), Henrique Leitão (Principal Researcher, History of Science and Technology, University of Lisbon), José Delgado Rodrigues (Former Research Coordinator, LNEC, Portugal), Maurizio Forte (Professor of Classical Studies Art, Art History, and Visual Studies, Duke University).

Public Council

IN2PAST' Public Council shall meet once per year, for one day, in Évora, to advise LA's plans for scientific research and higher education, development of public policies, partnerships with civil society and fundraising.

It is composed by 30 elements:

- The Board of Directors and the coordinators of the Thematic Lines;
- A representative of each the following State and Government agencies: DGPC, DGLAB,
 OPART, DGARTES, the Portuguese Ministry of Science, Technology and Higher Education,
 the Portuguese Ministry of Culture, and the Portuguese Ministry responsible for tourism;
- A representative of each of the Councils of the following municipalities: Évora, Lisbon,
 Coimbra, Braga and Guimarães;
- Seven representatives of the main business and civic partners of the LA, to be designated by the Board;
- One personality, to be designated by the Board, with no professional connection to academia but that stands out for their particular familiarity and intervention in culture and cultural heritage. This person will preside over the Public Council.

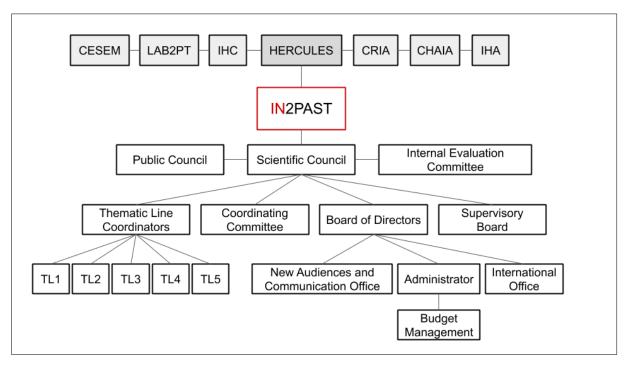


Figure 7 – Diagram of IN2PAST's internal organisation.

C.3. Development of Scientific Careers

IN2PAST is a LA supported by five management institutions (MI): the University of Évora (UE), the Universidade Nova de Lisboa (UNL), the University of Minho (UM), the University of Coimbra (UC) and CRIA.

Therefore, within the LA's scope, the scientific careers are structured in a diversified manner. However, we are able to point to two types of employment situations.

At the universities of Évora and Coimbra, the scientific careers will be developed under a Public Employment Contract, as predicted in the Scientific Research Career Statute (Decree Law No. 124/99, of 20 April, https://bit.ly/3188IqV, modified by the Law No. 157/99, of 14 September, https://bit.ly/3mrMMdY).

UNL and UM are charitable foundations established under private law, so the scientific careers are developed under the national Labour Code. For NOVA, hires are made under the Regulation No. 393/2018 (https://bit.ly/3kFmbK4); for the University of Minho, hires are made under the Ordinance No. 6870/2017 (https://bit.ly/3e8iz0P)

CRIA is hosted by four public university structures (UNL, UC, ISCTE-IUL and UM), but it is also a Management Institution by itself. Until now, all researchers who integrate CRIA have been hired by the abovementioned public universities, but CRIA is now creating their own Regulation concerning scientific careers. This process will be finished this year.

After the first five years of activity, IN2PAST may consider becoming its own Management Institution, even if preserving its interuniversity nature. If this is the case, IN2PAST will create its own scientific careers within the framework of the Scientific Research Career Statute.

This may also be an opportunity to give a proper institutional solution to the already mentioned possible integration of the researchers currently working at the DGPC's labs (José de Figueiredo Conservation and Restoration Laboratory; CNAN Conservation and Restoration Laboratory; and LARC — Archaeosciences Laboratory).

C.4. Attracting Talent

IN2PAST will establish a model for attracting and retaining international and national talent based on offering excellent working conditions in institutions located in different Portuguese cities.

The LA is in a position to ensure vibrant working conditions through a multidisciplinary environment, characterised by the intersection of different approaches, methodologies, and disciplinary traditions. The LA will offer unique conditions for access to a research career in Portugal in the fields of humanities and arts; early-career researchers will also be able to strengthen their curricula with opportunities to supervise masters and PhD students enrolled in the doctoral programmes of the associate RUs, as well as future doctoral programme promoted by the LA.

Another driving force to attract talent will be the IO, dedicated to developing and monitoring applications in competitive international calls, such as those of the European Research Council. Furthermore, a permanent call for applications to individual research contracts on a broad range of topics will evaluate and monitor selected applications for national and international calls, such as the FCT Scientific Employment Stimulus and the Individual Fellowships of the Marie Skłodowska-Curie Actions.

The LA's territorial decentralisation should likewise attract PhD students and researchers who will be able to take advantage of living conditions of different Portuguese cities, like Évora, Braga, Guimarães and Lisbon — all of which have high levels of quality of life. Cultural events, affordable living costs, a good and universal healthcare system, as well as excellent security levels, make these cities attractive places to live, while also having access to excellent research resources, such as specialised labs and libraries. The multicultural and collaborative working environment provided by research

teams with members from all over the globe will further appeal to international students and researchers.

Lastly, the AL will strive to provide better conditions for a work-life-family balance.

D. International Programmes and Networks

The public R&D of IN2PAST is based on a strategic plan supported by the ability to raise competitive funding in international programmes. The success of this strategy of applying for and obtaining competitive funding will depend on an executive managerial structure, namely the IO, responsible for the development of a portfolio of funding opportunities to be pursued in the coming years and for systemic management of grant life cycles, in order to build the resources and capabilities necessary to deliver long-term sustainable research at the LA.

In the last few years, the RUs that form this LA have proven to be skilled in obtaining funding through international competitive calls, such as the ERC Starting Grant 'CAPSAHARA — Critical Approaches to Politics, Social Activism, and Islamic Militancy in the Western Saharan Region' (CRIA; RR: Francisco Freire, TL5) or the Europe for Citizens project 'Portuguese and Spanish Forced Labourers under National Socialism: History, Memory and Citizenship'' (IHC; RR: Cláudia Ninhos, TL5). They have also been successful in other EU funding calls, namely FEDER, with the project 'CLABAT - Changing Landscapes. Bracara Augusta and its Territory (V-VII centuries)' (Lab2PT; RR: Manuela Martins, TL2).

Regarding Marie Skłodowska Curie Actions (MSCA), besides the researchers hosted by IHC and CRIA through Individual Fellowships, the project 'ED-ARCHMAT — European Doctorate in ARchaeological and Cultural Heritage MATerials Science' (2017), hosted by HERCULES Lab, and the project 'PALAMUSTO — Research and Training for the Palace Museum of Tomorrow' (2019), hosted by IHA, should be highlighted as significant examples of education for cultural heritage. ED-ARCHMAT, coordinated by HERCULES Lab with the participation of leading European institutions like Sapienza Rome University, Politecnico de Torino, Université d'Avignon, Universidad de Burgos, Université Bordeaux, Ben Gurion University, aims to train a new generation of conservation science professionals equipped with knowledge, competences and skills [(as defined in European Qualification Framework (EQF)] spanning different sectors such as physical and chemical sciences, cultural heritage, conservation, archaeology, museology, art history, project management, and information technology. PALAMUSTO was funded through the MSCA Innovative Training Network programme and brings together heritage institutions and palace-museums to provide training to early-career researchers. In the same programme, IHA was also granted the project 'NACCA — New Approaches in the Conservation of Contemporary Art' (2015-1019). Additionally, IHA participates in the COST Action 'European Forum for Advanced Practices' (2018). Furthermore, HERCULES Lab has an extensive experience in international training programmes coordinating the Erasmus+ Master ARCHMAT — Archaeological, a consortium with Sapienza University (Italy) and Thessaloniki University (Greece) and with partner institutions from five other countries. ARCHMAT provides a common, integrated platform for students from all over the world coming from different educational backgrounds (science and humanities) to understand the advanced scientific methods used to investigate archaeological materials and aims to form skilled experts in the emerging field of archaeometry. With a total of 160 enrolled students (average 19 per edition) from over 50 countries (including China) and invited experts from all over the world coming to teach under the programme, it has become an internationalisation vector of HERCULES Lab, through the development of joint research in different countries, including in Africa, Asia and America.

These RUs also have an extensive track-record in European and international networks and programmes. Since 2012, CRIA is an accredited NGO under the UNESCO Convention for the Safeguarding of Intangible Cultural Heritage (ICH); since 2014, it also integrates the working-group for the ICH of Portugal's National Commission for UNESCO. Among others, the AL's RUs are

members of the following: CLACSO — Latin-American Council for Social Sciences (IHC), European Forum for Advanced Practices (IHA), ICOM's Committee for Conservation (IHA), Europeana Network Association (IHA, IHC), International Art Market Studies Association (IHA), REPORT(H)A — Environmental History Network (IHC, Lab2PT), PNUM — Portuguese-language network of Urban Morphology (Lab2PT), EAHN — European Architectural History Network (Lab2PT), Atlas Network — Association for Tourism and Leisure Education and Research (Lab2PT), International Forum on Tourism and Heritage (Lab2PT).

Based on this extensive experience in obtaining research funds through competitive calls, the LA has a five-year fundraising plan with well-defined targets for each of the TLs, especially in the priority areas of R&D activity defined by the PERIN — Portugal in Europe Research and Innovation Network. In the framework of the forthcoming Horizon Europe, the LA will preferably present applications in Pillar 1 — Excellent Science and Pillar (namely through the European Research Council and MSCA) and Pillar 2 — Global Challenges and European Industrial Competitiveness. Under Pillar 2, special attention will be given to Cluster 2 — Culture, Creativity and Inclusive Society, namely in what is related to Point 2 — Promoting Cultural Heritage. Each application will go through a peer-review process of presentation and discussion of ideas and scientific concepts within the corresponding TL; pending approval, the proposal may be internally granted seed funds to further develop concepts and ideas for a year. Through this process, IN2PAST will financially support its researchers' applications to ERC Grants. In the first three years, we anticipate ten applications to ERC Starting Grants arising from the LA's ARs; in the first five years, four applications to ERC Consolidator Grants and two applications to ERC Advanced Grants. In the final two years, we anticipate an application to ERC Synergy Grants led by at least two PRs from IN2PAST, connecting TL1 with LT4, and TL1 with TL2. Notwithstanding their success as project coordinators, all researchers will be encouraged to find funding opportunities through Visiting Research Fellowships programmes within current ERC projects.

Other European funding will also be explored, according to the scientific scope and public or private partnerships established by researchers of different TLs. These applications to sectorial European calls will also be supported by small public or privately-funded national projects — namely through FCT (public), Regional Directorates of Culture (public), or the Calouste Gulbenkian Foundation (private) —, consolidating and advancing results and well-established partnerships. An example of this, important for researchers in TL5, is the Europe for Citizens programme, with specific calls for European Remembrance or Democratic Engagement and Civic Participation. Another important goal for the European Commission is the digitalisation of cultural heritage (TL1, 3, and 4), which will be pursued in the framework of the Digital Europe programme, focused on building strategic digital capacities for the EU. Researchers will also be encouraged to connect research initiatives across Europe through COST Actions, to adhere to Working Groups, and to apply to management committees in existing COST Actions strategic to the scientific fields of the LA.

IN2PAST RUs have also been successful in raising European funding for postgraduate training programmes. Such a case is the Erasmus+ programme 'HIPS — History in the Public Sphere', proposed, among other institutions, by the IHC. This is a two-year master programme that focuses on the ways the past is represented, contested and negotiated in the public sphere. It is co-funded for the 2019-2025 period through a partnership between Erasmus Mundus and the Inter-University Exchange Project of the Japanese Ministry of Education, Culture, Sports, Science and Technology. Also within Erasmus+, in August 2020 CHAIA initiated the project 'InnoLAND — Launching Innovation-Based Landscape Architecture Training Framework in Europe'. InnoLAND aims to facilitate transparency and recognition of skills and qualifications of landscape architecture professionals in the EU by developing the Common Training Framework. Given these and other fruitful experiences, we are

proposing an application to the MSCA Innovative Training Network programme in order to fund our future doctoral programme, establishing a strong link between the AL's skills, facets and research interests common to the associate RUs and our non-academic partners (museums, archives, etc.). This programme will build a bridge between excellent research, postgraduate training and non-academic expertise, thus attracting outstanding PhD candidates.

As mentioned above, given the RUs' track-record and anticipating the means necessary to operationalise this funding strategy, the AL will count on its IO, dedicated to (i) attracting European and international funding in competitive calls; (ii) attracting talent for postgraduate training and research positions.

In order to attract European and international funding, we will count on a two-pronged approach:

- A strategic and permanent link between the IO and PERIN's National Contact Point, with quarterly meetings to analyse and assess applications, science management training, promotion of participation in European networks or programmes, and specific sessions with researchers about current and future funding programmes;
- 2) Internally, an intensive articulation between the IO, the TL's coordinators, and Boards and science management teams from the RUs; with biweekly meetings between the IO and the TL's coordinators to define priority topics and future applications; and quarterly meetings between the IO and the Boards and science management teams from the RUs to capitalise on the institutional knowledge and enhance ongoing projects.

E. Proposal for Complementary Funding by FCT

Overall, the R&D units that are part of IN2PAST Lab obtained in the past years the following funding (values are displayed in thousands of euros, K€):

	2016	2017	2018	2019	2020	TOTAL
FCT	2 025 K€	1 903 K€	2 699 K€	3 788 K€	5 822 K€	16 237 K€
Other national						
funding	886 K€	897 K€	1 525 K€	1 572 K€	666 K€	5 546 K€
EU	492 K€	658 K€	7 070 K€	258 K€	598 K€	9 076 K€
Other international						
funding	229 K€	334 K€	784 K€	472 K€	228 K€	2 047 K€
TOTAL	3 632 K€	3 792 K€	12 078 K€	6 090 K€	7 314 K€	32 906 K€

For the next ten years, IN2PAST proposes a set of activities of research, dissemination, and organisation that justify complementary funding in relation to the budgets already attributed to the individual RUs composing this consortium. This new funding will be essential to (i) promote expertise at different levels of the researchers' careers, (ii) develop a solid communication strategy for general audiences, (iii) create a team to efficiently attract further international funding and applications and (iv) enhance the installed laboratorial capacity.

The requested funding will also be used to cover the meetings, twice a year, between the IN2PAST team and the chosen consultants - Barbara Kirshenblatt-Gimblett (New York University), Hilde Heynen (Katholieke Universiteit Leuven), Ewa Domanska (Adam Mickiewicz University at Poznan & Stanford University), Francesc Cortès Mi (Universidade Autónoma de Barcelona), Henrique Leitão (University of Lisbon), José Delgado Rodrigues (LNEC, Portugal) and Maurizio Forte (Duke University). These meetings are key opportunities not only to discuss and present research results and policy applications and assessments — through conferences and workshops — but also to promote expertise at a postgraduate level. Our aim is to integrate these experts in the various doctoral programmes involving IN2PAST's RUs at their respective universities, through both topical conferences and specific discussions with PhD students about their projects, fieldwork, and outputs.

In order to develop a solid communication strategy for a larger audience and policy makers, IN2PAST will build a new website with several science communication tools (e.g. a podcast and an IN2PAST YouTube channel) and design an extensive strategy of communication devoted to heritage and heritagization processes. This strategy will include the dissemination of the LA's research, activities and results, as well as the organisation of events with international impact around cutting-edge themes. Dissemination will be based not only on publications, but also on the organisation of exhibitions, films, and other output formats. Such emphasis on diversification will help reach a larger audience and increase the impact of the research carried out at IN2PAST.

IN2PASTwill hire an administrator who will coordinate all staff and supervise activities in terms of human resources and financial management. Additionally, IN2PAST will hire a new team of science managers — two located at the UE (HERCULES) and one at the UNL (IHC) — to efficiently attract international funding and applications (e.g. ERC, HERA, Horizon Europe, Gerda Henkel Foundation, Volkswagen Foundation, among others) but also implement the communication strategy. This new staff will be part of the IO and the NPCO, a structure designed within the LA to specifically address

and prepare applications to international funding. The IO will work closely with specialised international companies (e.g. Yellow Research) that support R&D units. The NPCO will work closely with the communication offices of the stakeholders and with media partners.

One of IN2PAST's priorities is to enhance the installed laboratorial capacity with the acquisition of state-of-the-art equipment, which is usually left out of the normal sources of funding. Specifically, in order to pursue the proposed research and development activities, IN2PAST requires the acquisition of new hardware for the UE, the UM and the UNL. This equipment will be used in the Digital Humanities Lab (IHC), the Sound Archive (CESEM) and the Audio-visual Laboratory (CRIA). It will reinforce the installed capacity for digitalisation, filmmaking and archival practices (of image, sound and manuscripts, among others) essential for all the planned R&D activities.

In terms of funding for human resources, there is also the expected integration into IN2PAST's research team, in 2021, of a PI with a permanent or open-ended contract, hired by UNL under the PREVPAP programme. Ushering in the creation of scientific careers is, as explained in section A of the application, a key dimension of the required funding.

E.1. On the Expected Funding for 2021-2025

The expected funding for the next five years stems from two main sources: FCT and European R&D funding programmes.

Regarding FCT, this includes the basic and regular funding allocated to the RUs in the framework of the 2017/2018 evaluation process. The results obtained in this evaluation by IN2PAST's seven RUs, with four of them classified as "Excellent" and three as "Very Good", lead to the allocation of significant funding, which will be spread over the period of 2020-2023, amounting to a total of €10,269 million. In addition, the same evaluation process enabled the granting of 41 PhD scholarships, with a duration of four years.

Still with regard to FCT funding, there is also the funding related to the contracts of the researchers who successfully applied to the scientific employment stimulus programme, who obtained funded fixed-term contracts. Likewise, among the research projects funded by FCT, some will reach completion in the period 2021-2025.

European funding has different origins. A substantial part comes from ERC Grants, namely the CAPSARA project, led by anthropologist Francisco Freire (CRIA). Another important source concerns the European fundraising capacity demonstrated by the HERCULES Laboratory, of which the Erasmus+ Master ARCHMAT project is an example, and by UNL's RUs, for instance Erasmus+ Joint Master Degree - History in the Public Sphere.

It should also be noted that, beyond the FCT and European programmes, funding has been obtained in the framework of regional programmes — both in Minho and in Évora — and private donations and patronage.