

History of Science International Conference

# Connecting Worlds

Production and Circulation of  
Knowledge in the First Global Age

University of Porto, Faculty of Arts and Humanities  
18-20 May 2016

## Book of Abstracts

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**Title:** Connecting Worlds. Production and circulation of knowledge in the First Global Age

**Organizadores:** Amélia Polónia; Fabiano Bracht; Gisele Cristina da Conceição; Monique Palma

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- Faculty of Arts of the University of Porto – PhD Program in History.

We thank Marlene Cruz for all support and unconditional help.



# WELCOME TO HISTORY OF SCIENCE INTERNATIONAL CONFERENCE

(HSIC – UP)

***Connecting Worlds. Production and circulation of knowledge in the First Global Age*** intends to create an opportunity for specialists in diverse fields of research such as History of Science, Colonial Studies and Global History, to have a crossover debate of innovative ideas. The meeting will focus on an idea that is progressively expanding parameters of research, according to which modern science and the modern world are understood as global while also being the result of intricate local processes. The exchanges, impositions and negotiation processes underlying the shared production and circulation of knowledge at a global level will be the subject of this conference. This Conference should question Eurocentric perspectives on building processes of scientific knowledge.

Welcome to the University of Porto History of Science International Conference  
***Connecting Worlds. Production and circulation of knowledge in the First Global Age***

The Organizing Committee

*Amélia Polónia*

*Henrique Leitão*

*Fabiano Bracht*

*Gisele Conceição*

*Monique Palma*

*Wellington Silva Filho*



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# THE CONFERENCE RATIONALE

## CONNECTING WORLDS: PRODUCTION AND CIRCULATION OF KNOWLEDGE IN THE FIRST GLOBAL AGE

While in the last ten years, historiographical revisions have occurred both on colonial studies and the history of sciences, those tend to progress along two parallel lines, without effective communication or reciprocal understanding.

At present, studies on empire building are under revision. Previously, they were based on three main methodological premises: they usually focused on central power strategies and policies, excluding the perception of how individuals and groups contributed to historical dynamics; their analysis, insisting on formal and institutionalised processes, tended to exclude those deriving from or performing within informal and non-state regulated contexts; and finally they disregarded the active influence of the agents, the societies and the civilizations of contact, in Africa, in Asia and in America, ignoring local inputs in colonial dynamics.

Currently, new generations of scholars tend to conduct colonial studies from a more trans-national, trans-cultural and trans-imperial perspective. A good example is the output of post-colonial studies, developed since the 1980s. The more recent perspectives centred on a connected history of the colonial empires (Subrahmanyam 2007), or the agenda of a highly prolific world or global history have been contributing to a revision of those interpretations of colonial phenomena, investigating colonial dynamics by means of a broader, more complex and holistic approach (Harrison 2004, 2010, 2012), as reflected in recent publications and the organization of scientific panels and conferences on the subject.

Such a historiographical revision required the adoption of concepts and models of analysis stemming from self-organization and cooperation theories. Recent works in historiography dealing with overseas expansion and colonization also looked at the role of informal and self-organized mechanisms, and highlighted the role of traditionally marginalized agents of empire building, including women performing as brokers and go-betweens (Polónia/Capelão, 2016).

Simultaneously, historians of science have been discussing the parameters of what can be classified as scientific knowledge in the Early Modern Age, developing the

concept of “Iberian Science” (Leitão/Costa, 2009) or even debating the mechanisms of production of a syncretic knowledge resulting from acquisitions provided by local agents both in Asia and the Americas.

In this context, debates on the role of the go-betweens, the intermediaries among European and local bearers of knowledge are taking on a central role. The cultural translation processes requiring both the comprehension of local processes of knowledge production and the mechanisms of a global circulation of persons, commodities, information and knowledge are also receiving attention, opening new avenues of research (Renn, 2015).

New analytical proposals are currently expanding the parameters of research, according to which some aspects of modern science and the modern world are understood as global while being the result of intricate local processes. Circulation and locality became core concepts of these theoretical approaches. The analysis of processes that combine polycentric and local production of knowledge with its global circulation turns out to be fruitful in historical analysis (Livingstone, D. (2003), Raj, K. (2000a, 2000b, 2007, 2013).

The international conference “Connecting Worlds. Production and circulation of knowledge in the First Global Age” will follow these trends. It aims at exploiting their implications for the actual production of knowledge in History. Since the connection between the local and the global within the framework of colonial contexts is at stake, the conference will establish a dialogue between experts on the History of Science and specialists on global and colonial studies, thus clarifying and reciprocally reinforcing the circulation of knowledge that has been recently created in each one of the historiographical fields involved.

Presenting recent theoretical and methodological orientations also developed within both U. Porto/CITCEM and U. Lisbon/CIUHCT, the HSIC – UP aims at providing the opportunity for specialists in Colonial Studies, Global History, History of Science, Atlantic Studies or Indian Studies to initiate a crossover debate designed to establish a (re)productive dialogue and to produce innovative ideas.

# PROGRAMME

## FIRST DAY: 18/05/2016

Anfiteatro Nobre  
Faculty of Arts and Humanities (Faculdade de Letras)

09h00: *Opening Ceremony by the Academic Authorities*

09h20: **Amélia Polónia** (FLUP/CITCEM) – *“Connecting worlds: Mechanisms and agents of circulation and transfer of knowledge (1500-1800) – the rationale for a Conference”*.

09h50: *Opening Conference*

**Kapil Raj** (Centre Alexandre-Koyré – EHESS) – *“Global Circulations and the Making of the Local”*.

11h00: **Florence Hsia** (University of Wisconsin – Madison/Department of History of Science) – *“Mobilizing the history of Chinese science”*.

11h30: **Cristiana Bastos** (ICS/UL) – *“Traveling objects and imagined networks: the Hawaiian-Pacific collection of the Lisbon Academy of Sciences”*.

12h00: **Fabiano Bracht** (CAPES/UP-FLUP/CITCEM) – *“Syncretism and shared production of knowledge in the 18<sup>th</sup>-century Portuguese India”*.

12h20: Debate

Anfiteatro 2  
Faculty of Arts and Humanities (Faculdade de Letras)

14h40: **Thomás A. S. Haddad** (USP) – *“Jesuits all over? Remarks on the historiography of science in Early Modern Global Missions”*.

15h10: **Heloisa Meireles Gesteira** (MAST/MCTI) – *“Jesuits missionaries and the circulation of plants and knowledge in the Portuguese empire in the Early Modern period”*.

15h40: **Danielle Sanches de Almeida** (FIOCRUZ) and **Wellington Bernardelli Silva Filho** (CAPES/UL/CIUHCT) – “*New Brazilian Medicines Circulation on Global Scale (16<sup>th</sup> to 18<sup>th</sup> century): the various narratives of medicinal herbs*”.

16h00: Debate

16h40: **Laurinda Abreu** (UÉvora/CIDEHUS) – “*Between Lisbon and the Empire: training and movement of healthcare professionals*”.

17h10: **Monique Palma** (CAPES/FLUP/CITCEM) – “*Circulation of knowledge between Portugal and Brazil in the eighteenth century. The case study of thermal bathing*”.

17h30: **úlio Manuel Rodrigues Costa** (FLUP/CITCEM/CMP/BPMP) – “*Previous owners, circulation and censorship of scientific-medical books (16<sup>th</sup> and 17<sup>th</sup> centuries): analysis of copies from the Municipal Library of Porto*”.

17h50: Debate

## SECOND DAY: 19/05/2016

Sala de Reuniões, 2nd. Floor  
Faculty of Arts and Humanities (Faculdade de Letras)

09h00: **Ana Simões** (UL/CIUHCT) – “*Moving localities, creative circulation and changing geographies*”.

09h30: **Jorun Poettering** (LMU Munich, Marie Skłodowska-Curie Fellow) – “*Brokerage or concurrence of knowledge? The role of Portuguese, international and Afro-Brazilian experts in the construction of colonial Rio de Janeiro*”.

09h50: **Ana Duarte Rodrigues** (UL/CIUHCT) – “*Al-Andalus` water technology in Latin America*”.

10h10: Debate

10h50: **Luiz Cláudio Ribeiro** (UFES/FLUP) – “*The chessboard and the key parts (1580-1650): men who built bridges between worlds in early Portuguese colonization*”.

11h10: **Ana Catarina Garcia** (CHAM/UNL) – “*New ports of the Atlantic (17<sup>th</sup> – 18<sup>th</sup> centuries) – two case studies of Angra and Port Royal. How local agents transfer knowledge and technologies for the functioning and defense of insular seaports*”.

11h30: **Harald Gropp** (University of Heidelberg) – “*Under One Sky: Connecting America on maps around 1500 using European and Indigenous Knowledge*”.

11h50: **Antonio Sanchez** (UL/CIUHCT) – “*Controlling and standardizing artisanal practices in early modern Portugal: the case of nautical cartography*”.

12h10: Debate

Sala de Reuniões, 2nd. Floor  
Faculty of Arts and Humanities (Faculdade de Letras)

14h30: **Lorelai Kury** (FIOCRUZ) – “*Imperial botany: the studies of Auguste de Saint-Hilaire and Robert Brown on plant forms and distribution*”.

15h00: **Carla Vieira** (CHAM-FCSH/NOVA-UAç) – “*From the Garden of Mr. Lindo to the Royal Society of London. Scientific and trade networks in the 18<sup>th</sup>-century Atlantic*”.

15h20: **Emma Sallent Del Colombo** (Independent Scholar, Barcelona) – “*Ulisse Aldrovandi’s network of circulation of natural knowledge: some working hypothesis on Portuguese connections*”.

15h40: Debate

16h20: **Jose Pardo Tomás** (CSIC/Universitat de Barcelona) – “*The transmission of indigenous knowledge and the regime of writing in Francisco Hernández’s Historia natural de la Nueva España, 1570-1577*”.

16h50: **Julianna Morcelli Oliveros** (CAPES/IMF/CSIC-Barcelona/LHC) – “*A sweet pharmacy: Galenism, Natural Philosophy and chocolate consumption in Eighteenth Century Barcelona*”.

17h10: **Onésimo Almeida** (Brown University) – “*On experience in 16<sup>th</sup> century Western Europe – Portugal and other more isolated developments*”.

17h40: Debate

### THIRD DAY: 20/05/2016

Anfiteatro Nobre  
Faculty of Arts and Human Sciences (Faculdade de Letras)

10h00: **Nina Vieira** (CHAM/FCSH/UNL/U. Açores, Portugal) – “**A comparative approach to historical whaling techniques: Transfer of knowledge in the 17<sup>th</sup> century from the Biscay to Brazil**”.

10h20: **Ana Cristina Roque** (CH-ULisboa) – *“Towards a Scientific Approach of Nature: Southern Africa Marine Fauna in the 16<sup>th</sup> century Portuguese registries”*.

10h40: **Cristina Brito** (CHAM/FCSH/UNL/U. Açores, Portugal) – *“(Un) Connected Margins: Exotic marine animals in the making of the European Natural History”*.

11h00: Debate

Anfiteatro Nobre

Faculty of Arts and Human Sciences (Faculdade de Letras)

14h00: **Timothy Walker** (University of Massachusetts Dartmouth) – *“Assimilation, Codification, and Dissemination of Indigenous Medical Knowledge within the Portuguese Maritime Empire: 16<sup>th</sup>-18<sup>th</sup> Century Ethno-Botanical Manuscripts”*.

14h30: **Rafael Dias da Silva Campos** (CAPES/CHAM-UNL) – *“The Luso-Brazilian medical students at Montpellier, and the connections of two Atlantic empires”*.

14h50: **Gisele Cristina da Conceição** (CAPES/UP-FLUP/CITCEM) – *“Circulation of agents, texts and scientific knowledge between Portugal and Brazil in 18<sup>th</sup> century”*.

15h10: Debate

Anfiteatro Nobre

Faculty of Arts and Human Sciences (Faculdade de Letras)

16h00: *Closing Conference*

**Junia Ferreira Furtado** (UFMG) – *“An European Republic of Letters and its connections in Portugal”*.

16h50: *Closing remarks: Henrique Leitão* (UL/CIUHCT). *History & Science: Balance and Prospective*



# ABSTRACTS





KAPIL RAJ

*(Centre Alexandre-Koyré – EHESS)*

### **Global Circulations and the Making of the Local**

The relationship between global, or mainstream, and local knowledge is taken to be mean one of two things: either the local is considered to be a pocket of isolation, or resistance, against the ever-expanding network of global phenomena, including science; or else, the local (commonly taken to be a specific, or situated, laboratory) is taken to be the origin of knowledge which is then globalized through a myriad strategies analysed in recent years by science studies. Using a number of examples from the history of botany and medicine between the 16<sup>th</sup> and 18<sup>th</sup> centuries in the Indian subcontinent, this talk will, on the other hand, show a complex and dialectical relationship between the local and the global. It will bring to light the unceasing construction and reconfiguration of the local as a result of its feeding on, and into, the differential long- and short-range commercial, medical, imperial, religious, and diplomatic circulations of multiple origins that traversed the region during this period.

FLORENCE HSIA

*(University of Wisconsin – Madison/Department of History of Science)*

### **Mobilizing the history of Chinese science**

With the first volume of Joseph Needham's *Science and civilization in China* (1954–) began the modern mobilization of Chinese science as a topic of historical investigation. Born from and sustained through an increasingly global intellectual community, Needham's project exemplified an approach to the history of Chinese science that was at once recuperative, diffusionist, and, at the same time, unrelenting in its affirmation that modern science was European, not Chinese, in origin. SCC's ultimate goal was to answer Needham's 'question': why did China, with its long and storied history of scientific and technological achievement, not produce modern science? By the time that the SCC project moved towards its concluding volume 7 in the 1990s, the Needham question had lost much of its conceptual and methodological grip on the profession. Yet origin stories are powerful, and negative ones perhaps especially so. Needham's mobilization of the history of Chinese science has produced and provoked new ways of understanding practices of knowledge-making that span linguistic, confessional, and political borders. Drawing on the SCC as an origin point, this talk remobilizes early modern efforts to write the history of Chinese science in order to think anew about the global processes and agents of translation through which such 'pre'-modern histories of Chinese science were produced.

CRISTIANA BASTOS  
(ICS/UL)

**Traveling objects and imagined networks: The Hawaiian-Pacific collection of the Lisbon Academy of Sciences**

The collection consists of a few objects from the Pacific Northwest (Kwakiutl, Tinglit, Nootka) and from Hawaii, probably from the 18<sup>th</sup> century, that were wrongly classified as African art and remained as such for decades in the not too accessible possessions of the Lisbon Academy of Sciences. Recently, two researchers rectified the gross mistake and featured the objects as a special collection with dignified exhibit stands and appropriate labels. However, in the absence of solid data about the routes and chains of people that mediated the circulation of those objects between their original makers and owners in the Pacific and the estate of the remote Academy of Sciences in Lisbon, a combination of imagined routes and actual historical connections shaped its way as an institutional narrative that at some point was included in the official webpage of the Academy of Sciences: the objects had been collected by Captain Cook in his Third Voyage; they had survived Cook's sacrificial death as an avatar of Hawaiian God Lomo (a depiction disputed by anthropologists Sahlins and Obeyesekere); they travelled all the way back to England and were handled by the naturalist Joseph Banks, who had been part of Cook's expeditions; Joseph Banks gave the objects to his personal friend Correia da Serra, a prominent Portuguese naturalist who was one of the founders of the local Royal Academy of Sciences; Correia da Serra brought them to Lisbon and there they remained. Both the imagined and factual elements of this narrative are interesting entries to the scientific networks and routes of traveling objects in the late 18<sup>th</sup> century, which I will explore in this paper based on a number of complementary sources.

FABIANO BRACHT  
(CAPES/UP-FLUP/CITCEM)

**Syncretism and shared production of knowledge in 18<sup>th</sup> century Portuguese India**

Within the Portuguese overseas empire, flows of information and knowledge circulated among Asia, America, Africa and Europe, shaping new cultural patterns. Important exchanges occurred leading to cultural impacts, and promoting the development of intellectual hybridization processes. Natural Philosophy, Medicine and Pharmacy are three fields of knowledge to which these processes are inextricably linked. The production of a vast empirical knowledge can be seen as a resultant of the imperial

expansion itself. However, the process, as a whole, is much more complex. The efforts to expand, organize and rule the empire mobilized diverse human resources and knowledge coming from quite different backgrounds. These individuals constituted themselves as communication channels and negotiation agents. This is the background against which this paper will present the current state of a PhD research project on the production of medical manuscripts in 18<sup>th</sup> century Goa. The emphasis will be on the identification of some of these agents, as well as on the role of Indian agents and their relationship with the colonial power structures.

THOMÁS A. S. HADDAD  
(USP)

### **Jesuits all over? Remarks on the historiography of science in Early Modern Global Missions**

In the last two decades or so, Jesuit missionaries have become a staple for much work done by an increasingly globally-turned community of historians of science. As the story goes, from the middle of the 16<sup>th</sup> century on European expansion was deeply entangled with the missionary presence of the Society of Jesus. Numbering to the thousands, Jesuit priests and brothers are to be found in the New World, Africa and Asia (not to mention the many “interior missions” in Europe itself), in settings ranging from humble popular missionary stations to powerful sovereign courts, from small professed houses to large colleges in colonial towns all over the world. Even with conversion and the “care of souls” as conspicuous purposes, their practices and functions are manifold: teachers, ambassadors, traders, brokers mediating between different imperial, commercial, private and corporate interests (for the greater glory of God or for more mundane reasons) – in a word, the ultimate cultural translators or go-betweens, lauded or deplored in their efforts to make sense of the encounters of which they were part in so many of the early modern contact zones. Without downplaying their importance, my aim in this talk is to reflect on the historiographical underpinnings of the Jesuits’ apparent centrality in the new global narratives dominating the history of science, with special emphasis on knowledge practices in the Iberian empires. In particular, I intend to remark how the idiom of “transfer”, “transmission”, “exchange”, “diffusion” and so on (with the attached conceptual choices and prejudices) is firmly entrenched in the literature about the relation of Jesuit missions to the whole business of early modern science and empires, be it apologetic or of a post-colonial, critical standpoint: in any case, knowledge and power remain predicated on European agents and European history, which keeps determining the rhythms of what is purportedly “global”. Additionally, presenting a few case studies

from early 17<sup>th</sup> century Jesuit missionary writings, I suggest ways in which we could produce less grandiose (for better or for worse), but not less informing, narratives about their place in a global history of knowledge.

HELOISA MEIRELES GESTEIRA  
(*MAST/MCTI*)

**Jesuit missionaries and the circulation of plants and knowledge  
in the Portuguese empire in the Early Modern period**

This communication is mainly about one manuscript document entitled “Formulário Médico, 1703 – encontrado em uma arca da Igreja de São Francisco de Curitiba e atribuído aos Jesuítas”. (Medical Form, 1703: found in one Ark in the São Francisco Church attributed to the Jesuits). The notebook contents an extraordinary number of medical prescriptions made from plants, part of animals and minerals. In the first part of our work, we bring information from the documents which indicates that it could really have belonged to or have been used in some place administered by the Jesuits in Portuguese America such as Indian villages, sugar mills, farms and colleges. It is important to notice that in all those spaces the Jesuits had apothecaries where they sold and made medicines as well. In the second part, from the descriptions of the recipes and the uses of flora, we argue mainly how the cultural environment in Portuguese America concerning to the medical knowledge cannot be understood from a local and isolated perspective, but it is connected with a wide process of accumulation, appropriation and circulation of the “*matéria medica*” within the Portuguese Empire as well as in a global dimension.

DANIELLE SANCHES DE ALMEIDA  
(*FIOCRUZ*)

WELLINGTON BERNARDELLI SILVA FILHO  
(*CAPES/UL/CIUHCT*)

**New Brazilian Medicines Circulation on Global Scale  
(16<sup>th</sup> to 18<sup>th</sup> century): the various narratives of medicinal herbs**

The focus of this presentation is how the medicinal herbs were introduced in the European medical canon on the 18<sup>th</sup> century. Thereunto, this presentation will be concerned with the various narratives of an herb through the centuries, as well as descriptions and experiments carried out to it be considered an effective medicine.

For this purpose, a medicinal herb should move through a number of stages, which consisted: the observation of medical indigenous practice, his first European descriptions, the standardization of its common nomenclature, the experimental use by European physicians and apothecaries, and finally the commerce of these herbs through the Globe, which was tightly bound to their acceptance on the medical canon. Therefore, the presentation will discuss the trajectory of two medicinal herbs in Brazil: the *ipecacuanha*, which appears in first reports of Jesuit missionaries in the 16<sup>th</sup> century, and the *aypana*, that has been recorded with this nomenclature only in the late 18<sup>th</sup> century.

LAURINDA ABREU  
(U. Évora/CIDEHUS)

### **Between Lisbon and the Empire: training and movement of healthcare professionals**

Our relational database on healthcare professions (1498-1826) contains 25,000 records of individual surgeons and apothecaries with licenses to practice their professions, physicians trained abroad whose qualifications were recognized on their return to Portugal, and health professionals awarded public professional appointments (*partidos*), including physicians trained at Coimbra University. However, less than 1,000 of these records relate to Portugal's colonies. Except for Brazil (with over 700 individuals), India and Morocco, references to the other colonies are negligible. These data on the empire, although scarce, reveal certain patterns in the action taken by the crown and private individuals in terms of the movement of healthcare professionals and, consequently, the spread of knowledge. Although the study of this information is still at a very preliminary stage, this paper aims to provide a comprehensive picture of the various categories of healthcare agents emigrating from Portugal to the different parts of the empire, with their numbers and destinations. Given that the main reason for emigration was to seek better professional opportunities, can any career pathways be reconstructed? Was the change in social status that has already been seen in Morocco repeated in other colonies? Was there any migration of surgeons? Did *partido* appointments in the colonies follow the same rules as in the mother country, or were they more susceptible to personal and client relations? Did the institutional changes in this sector that occurred in Portugal during the second half of the eighteenth century affect the recognition of local training in the colonies? We will attempt to answer these and other questions and to develop hypotheses that may help to account for the migration of physicians between Portugal and its empire.

MONIQUE PALMA  
(CAPES/FLUP/CITCEM)

**Circulation of knowledge between Portugal and Brazil  
in the eighteenth century. The case study of thermal bathing**

The circulation of medical and surgical knowledge between Portugal and Brazil in the eighteenth century is a field of studies already significantly examined by both the Portuguese and the Brazilian historiography. Physicians, surgeons and apothecaries were fundamental elements in this process of knowledge transmission. Still requiring further scrutiny is, however, the way that knowledge was validated and put into practice, in Portugal and Europe. The contents of text books as well as medical and surgical books are the usual way to inquire how that knowledge was validated and incorporated. This paper will try a different approach. In eighteenth century Portugal and Brazil, bathing in warm waters was considered a method for healing different afflictions. In specific regions of both territories, baths or ingestion of thermal waters was prescribed for the restoration of good health. However, it is still unclear how this practice had been transmitted within the metropole (Portugal) and the colony (Brazil), and also how channels of transmission of that kind of information worked. In order to take a closer look at this topic, this paper will focus on some sources from Portugal and Brazil. For Portugal we will take into account the *Aquilégio Medicinal* (1726), written by Francisco da Fonseca Henriques, the *Methodo Pratico para se tomarem os banhos das Caldas do Gerês e de outras quaesquer Caldas do Reino, adquirido pela experiencia de vinte, e tantos annos, que os tomou, e vio tomar a muitos doentes de varios achaques* (1763), written by António Martins Beleza, and the *Provisão real a regular os banhos de rio como forma de remédio para os officiaes militares doentes, à semelhança do que aconteceu com os banhos das Caldas. Registada na Contadoria Geral da Guerra e na Vedoria do Alentejo* (1744), by an anonymous author. For Brazil we will use the *Prodigiosa lagôa descoberta nas Congonhas das Minas do Sabará, que tem curado a várias pessoas dos achaques, que nesta Relação se expõem* (1749), written by José Cardoso de Miranda, and *Breve Transumpto das Notícias da Lagoa grande, virtudes experimentadas em diversos achaques, e cautelas necessárias para o uso dos seus banhos, “publicado para consolação e regime dos enfermos, que no presente estio se houverem de transferir àqueles banhos* (1749), written by Antonio Cialli. Based on the theoretical framework currently relevant, the paper will try to explain the circulation of knowledge applied to the practice of thermal bathing as medical and surgical treatment in the 18<sup>th</sup> century.

JÚLIO MANUEL RODRIGUES COSTA  
 (FLUP/CITCEM/CMP/BPMP)

**Previous owners, circulation and censorship of scientific-medical books  
 (16<sup>th</sup> and 17<sup>th</sup> centuries):  
 analysis of copies from the Municipal Library of Porto**

This work focuses on a listing and a reflection on a set of relevant printed sources, from sixteenth and seventeenth centuries, for the history of science and medicine in Portugal and Europe. This approach gives emphasis to some representative or rare scientific and medical books currently belonging to the heritage collections of Oporto Public Library. Several copies have been examined (handwritten annotations and marginalia, characteristic bindings, private and religious ownership marks, tracking of transit routes in some of these printed books, ...) and a close connection was established between identifying marks, previous owners and book circulation. Censorship signs are also mentioned.

ANA SIMÕES  
 (UL/CIUHCT)

**Moving localities, creative circulation and changing geographies**

Studies oriented towards the phenomena of circulation have spurred a growing understanding of imperialism and colonialism as historical movements that created opportunities for interaction with native traditions and systems of knowledge, giving way to mutual appropriations and reconfigurations. In this talk I reappraise aspects of the recent historiography of circulation, with recourse to the conceptual and methodological apparatus developed in the context of the Science and Technology in the European Periphery (STEP) international network. By re-directing the discussion to encounters, exchanges and divergences that took place within Europe mostly in the 18<sup>th</sup> century, I re-appraise three major issues: circulation, locality, and the mutual configurations of centres and peripheries. My contention is three-fold. First, circulation is not only a way of transmitting or spreading knowledge but also a way of producing it. Second, locality is not necessarily coincident or constrained by location. Third, centres and peripheries must be regarded as co-constructed and mutually dependent entities whose status changes in time, and not as tokens of a steady, hierarchical geography. By calling attention to the work of intercultural subjects, often absent from traditional historical narratives, by following their movements across disciplinary and territorial borders, and asserting their role in the production



of scientific and technical knowledge, historians will be able to weave more nuanced stories about the complex and multifarious cultural encounters, which molded the European intellectual space that shaped the notion of European science.

JORUN POETTERING

*(LMU Munich, Marie Skłodowska-Curie Fellow)*

**Brokerage or concurrence of knowledge?  
The role of Portuguese, international and Afro-Brazilian experts  
in the construction of colonial Rio de Janeiro**

The paper will investigate the military engineers, architects and artists who participated in the building of colonial Rio de Janeiro, giving special emphasis to its water supply infrastructure. It will ask for the experts' national and educational backgrounds and how these were exploited for their careers. It will try to reconstruct their role in the local society, their potential function as brokers and go-betweens, but also the possible competition among them. This will be done not only in strictly historical terms but also regarding their afterlives. The different protagonists will thus be interpreted regarding their role in constructing a well working colonial city, but also in terms of providing the inhabitants with the means of developing a specific local identity.

ANA DUARTE RODRIGUES

*(UL/CIUHCT)*

**Al-Andalus' water technology in Latin America**

Focused on the circulation, transmission and adaptation of water technology used in the Al-Andalus, embodied in the Spanish knowledge literature and praxis until it was transferred and adapted in Latin America in the 16<sup>th</sup> century, this paper will demonstrate the route of water technology devices. Water devices such as “algibe” (cistern), “albanal” (channel), “acequias” (channels), “alema” (irrigation), “alberca” (well), “almoceada” (the right to consume water for certain days), will be traced since they were quoted by Ibn Al-Awwam’s Treatise on Agriculture (12<sup>th</sup> century) until they were embodied in Alonso Herrera’s Agricultura General (1513) and used in 16<sup>th</sup> and 17<sup>th</sup> century Mexican and Brazilian documents and literature. This work took stock of the recent debate on knowledge transfer to the New World, such as the “colonial mill” concept (Gerardo, 2016). Through which kind of routes knowledge circulated and who the main actors were, how this knowledge was delivered and used – both in water scarcity areas as in water abundance –, which obstacles and constraints

to water technology transfer had to be faced in the New World, are the questions thus posed. Furthermore, I will demonstrate Latin American water management innovations in devices such as “ingenio in Castilian/engenho in Portuguese”. My argument is that there are slight and debatable boundaries between adaptation and innovation. Knowledge and technological transfer introduced into Latin America by the Portuguese and the Spanish had to be adapted to their topography, climate and water resources. And adaptation had pushed for innovation.

LUIZ CLÁUDIO RIBEIRO  
(UFES/FLUP)

**The chessboard and the key pieces (1580-1650):  
men who built bridges between worlds in early Portuguese colonization**

The paper deals with the strategies of two Portuguese men – Leonardo Fróes and Marcos Monsanto – who had free passage between Portugal and the Hapsburg Spain. They held official State positions, as well as being ship owners and traders along sea lanes. By extension of their political and economic influence they also belonged to overseas elites. They had access to goods as well as information from the American and the Eastern cultural universe obtained through personal relationships. All this they used to establish commercial circuits and transfer materials and symbolic European values overseas, and from there back to Europe. The circuits they dominated were formed, on the one hand, by sending agents of their investments – sons, relatives and technical staff – overseas to build sugar mills and the productive structures, and to compose the socially dominant local power groups. On the other hand, these men also had ships and traded various goods gathered in Portuguese ports from different geographical origins in addition to carrying people. Thus, they contributed to ethnic and cultural exchange channels and to the increased demand for consumption materials and symbolic goods, patterns established between the Iberian Peninsula and overseas trading places in Brazil and India.

ANA CATARINA GARCIA  
(CHAM/UNL)

**New ports of the Atlantic (17<sup>th</sup>-18<sup>th</sup> centuries) – two case studies of  
Angra and Port Royal. How local agents transfer knowledge and  
technologies for the functioning and defence of insular seaports**

This paper is part of a wider and thorough comparative approach of the Portuguese and British imperial systems during the 17<sup>th</sup> and 18<sup>th</sup> centuries, based on case studies

of islands and New World Atlantic ports. In this specific work I propose to analyse the agents who took the European technology and knowledge to build new defensive and port structures. For this purpose, the case studies are Port Royal in Jamaica and Angra in Azores, both natural and insular ports that needed to be very well defended and prepared for trade because of the importance they had for both empires and intensity of the threats – natural and human. For this new territories the crown sent officers, engineers and agents for local governance, all had to be responsible for the application of the original European models and projects to build and organize new defensive system, quays for loading and other structures. But they had to adapt the original projects and technologies to different geographies, different geologies, such as basement rocks or inert materials. Here it is also important to talk about how building techniques and engineering plans that had to be adapted to tectonics vulnerabilities and climatic constraints by the severity of storms and hurricanes, requiring continuous rebuilding.

HARALD GROPP  
*(University of Heidelberg)*

**Under One Sky:  
Connecting America on maps around 1500 using European  
and Indigenous Knowledge**

At the end of the fifteenth century the European ships had reached the continents of Africa, Asia, and America. While the islands and continents which they touched were quite new, the sky was still familiar. Only when they reached regions further in the southern hemisphere the admirals saw new stars (and constellations) which they also used for navigational purposes. This paper will discuss how the picture of the earth changed on maps during the last years of the fifteenth and the early years of the sixteenth century. Before the conquest the knowledge consisted of ancient traditions (e.g. Ptolemy) in combination with contemporary regional experience obtained by land and sea travels. The encounter with new islands and continents gave the chance to include indigenous local knowledge as far as possible. This paper will focus on the new experiences in the « Western Ocean » and how they shaped new maps. On the one hand, this led to the « invention of America » by positioning and connecting islands or groups of islands. On the other hand, the evolution of maps leads to different ways of “projecting” continents. The talk will particularly focus on the interaction of Europeans and non-Europeans. The influence of new maps on new expeditions and their financial support will be considered. Last but not least, the same sky in East and West helped to connect and guide navigation between Europe and America.

ANTONIO SANCHEZ  
(UL/CIUHCT)

**Controlling and standardizing artisanal practices in early modern  
Portugal: the case of nautical cartography**

The maritime expansion generated great transformations in the way early modern European monarchies interact with scientific practices and its practitioners. In the case of Portugal, Crown sought to control and standardize a series of spaces, objects, positions, and artisanal practices related to maritime culture and cosmography. This is quite evident in some official documents of the time, as the *Regimento do Cosmógrafo-Mor* (1592), the proof of a complex process of normalization, control and circulation of information that ultimately regulated the nautical and cosmographical practice of a long-distance global network. The aim of this paper is to reconstruct the conditions of production, correction, implementation, and use of so-called *cartas novas* (new nautical charts) and the *cartas padrões* (nautical pattern charts) produced and stored in the *Armazéns da Guiné e Índia* in Lisbon from the second half of the fifteenth century. With this, I will show both the complex mechanisms created by the Portuguese monarchy to control long distance oceanic travel, as well as the sophisticated organization of artisan communities that sustained European expansion. This paper attempts to situate the specific work of the Portuguese cartographers of the fifteenth and sixteenth centuries in the current historiographical context around the notion of ‘artisanal epistemology’ (Pamela H. Smith) and ‘trading zones’ (Pamela O. Long), but also reflect on the social status of these artisans.

LORELAI KURY  
(FIOCRUZ)

**Imperial botany: the studies of Auguste de Saint-Hilaire and  
Robert Brown on plant forms and distribution**

The voyagers and naturalists Auguste de Saint-Hilaire and Robert Brown approached their science in a similar way, conjoining Jussieu’s natural system with botanical geography. They sought to reveal repetitions and patterns in the plant world, both on a small (and even microscopic) scale and in terms of the geographic and worldwide distribution of plants. Moreover, they wanted to detect the patterns that govern interactions between plant groups and the world’s different climates and geographical regions. Natural history was supposed to foresee the behaviours and actions of the natural world, particularly in places where Europeans had little knowledge or in

situations of biological transformation, brought about by the global circulation of living beings and of goods. The kind of knowledge they wanted to establish would make it possible to recognize flora from unknown places by identifying “natural” similarities and affinities. According to this scientific method, morphological botanical kinship could provide more precise information about the properties of plants than could the native cultures that had co-existed with these plants for centuries. Their works on biogeography constitute a learned assemblage, compiled amidst books, manuscripts, herbaria, correspondence and collections and through direct contact with people. The material they gathered on their own journeys made sense when compared to the products brought by other travellers. Thus, my goal is to survey the scientific conditions in which they produced their work, which associated morphology with place.

CARLA VIEIRA  
(CHAM-FCSH/NOVA-UAç)

**From the Garden of Mr. Lindo to the Royal Society of London.  
Scientific and trade networks in the 18<sup>th</sup> century Atlantic**

When Moses Lindo tried to extract a new dye from the crimson juice of a berry grown in his garden in Charleston, he did not keep secret the results of his experiments. He described them in detail in a letter on September 2, 1763 and sent it to Emanuel Mendes da Costa, naturalist and librarian of the Royal Society, who read it before his peers. The report was published in the *Philosophical Transactions* (PT) later that year. Moses Lindo was a businessman and the inspector-general of indigo in South Carolina. The description of his experiments is in line not only with the contemporaneous interest in Natural History, but also with what we could call “applied science” – more than purely scientific, his aim was to discover a new commodity. The Royal Society was probably not indifferent to this potential application of Lindo’s discovery. Less than three months was the time that his report spent from his house in Charleston to the pages of the PT in London. Lindo used a traditional form of communication: a letter addressed to a fellow of the Royal Society. Like him, this fellow was a Portuguese Jew whose family was deeply integrated into wide business networks with branches across the Atlantic. Lindo and Costa’s families had a long history in common. Therefore, the communication channels used by Lindo to disclose his experiments were the same by which goods and capital flowed. This will be the starting point of this paper, framing this case-study in the processes of knowledge circulation, commercial dynamics and Sephardic diaspora in the 18<sup>th</sup> century Atlantic.

EMMA SALLEN T DEL COLOMBO  
*(Independent Scholar, Barcelona)*

**Ulisse Aldrovandi's network of circulation of natural knowledge:  
 some working hypothesis on Portuguese connections**

Even if the Italian naturalist and physician Ulisse Aldrovandi (1522-1605) hardly ever abandoned his home town of Bologna and most of his one hundred and twenty correspondents were from the Italian peninsula, he was able to gather information from almost everywhere as the geographical labels in the annotations of his three hundred volumes of manuscripts show. Among the entries related with Portugal in his catalogue of manuscripts, for instance, we may find the items: "Petenda a Lusitano" (Ms. 98, vol. III), "Ex prima parte degli avvisi d'Indie di Portogalo da Gesuiti scritti" (Ms. 136, vol. VII) or "Lusitaniae catalogus" (Ms. 143, vol. II, vol. VII), which are a suggestive testimony of his collecting capacity. How was this information transmitted? Who were the intermediate actors that allowed this knowledge to widely circulate mostly in a hardly unexpected way, connecting Europe with the most remote countries, both East and West? Aldrovandi's collection of manuscripts, illustrations, books, wooden blocks and objects, kept at University Library and Museo di Palazzo Poggi in Bologna, offers us a splendid battlefield in order to try to answer to some of these questions. I will present some working hypothesis that may help us to partially unveil the complexity and richness of the network of networks of his "molti amici in varij luoghi".

JOSE PARDO TOMÁS  
*(CSIC/Universitat de Barcelona)*

**The transmission of indigenous knowledge and the regime of writing in  
 Francisco Hernández's *Historia natural de la Nueva España*, 1570-1577**

The aim of my talk will be to raise the need to address the analysis of the regime of writing of the texts describing the Mexican flora and fauna made by Francisco Hernandez during his stay in New Spain. These texts – originally written in Latin – as well as more than two thousand images – carried out by indigenous painters – that accompanied them should have set up a 'Natural History of New Spain', which finally, as is known, did not result in a print edition. Our proposal is based on the conviction that only an analysis that takes into account this regime of writing these texts allow us to gauge the extent of the transmission of Mesoamerican indigenous knowledge to the European colonizer. It will not suffice to say that Hernández was guided by the classic models of Pliny and Dioscorides – revised by Renaissance Humanism in Europe – in designing his *Historia Natural de la Nueva España*. So one of the

things we want to argue is that *Historia Natural de la Nueva España* was projected as a Hernandian discussion of Pliny's work, but ended up being a discussion about Mesoamerican indigenous knowledge. To this end, they will be subject to scrutiny some examples of descriptions of plants and animals to illustrate to what extent this discussion permeates much of the writing of Hernandez.

JULIANNA MORCELLI OLIVEROS  
(CAPES/IMF/CSIC-Barcelona/LHC)

### **A Sweet Pharmacy: Galenism, Natural Philosophy and Chocolate Consumption in Eighteenth Century Barcelona**

The emergence of the so-called “New Worlds” in the Early Modern Europe promoted a process of intense cultural, economic and social exchanges between the ‘Four Parts of the World’. This process contributed to the development of new paradigms in several areas of knowledge, especially Natural Philosophy, as well as Medicine and Natural History. Collecting, correspondence and other cultural practices served to produce and put in circulation new knowledge, new products and new uses of natural species. Barcelona was an example of the interaction of some European cities with the new products coming from the new territories. This paper aims to present my PhD project in progress. The main subject of our analysis is the role played by Salvador family in this interaction. The Salvador was a family of apothecaries, druggists, collectors and natural philosophers engaged in the drug trade since the early Seventeenth to the mid-Nineteenth centuries. Over five generations, the family acquired objects, books, plants, minerals and animals to form an impressive collection. The Salvador's Cabinet of Curiosities was well connected with other cabinets of different European cities like Paris, Montpellier, London, Leiden, Naples, Palermo, etc. In this context, we intend to analyse the presence of American botanical species in this Cabinet, especially cocoa (*Theobroma cacao*), showing its use in the Spanish pharmacopoeia and relating it to the birth and development of modern science not only in Spain but also in the whole Western Europe.

ONÉSIMO ALMEIDA  
(Brown University)

### **On experience in 16<sup>th</sup> century Western Europe – Portugal and other more isolated developments**

It was not only in Portugal that the idea of experience as a fundamental criterion of truth was gaining ground. Figures such as Montaigne, Leonardo da Vinci, Paracelsus,

and Andreas Vesalius were aware of, and did write about its importance. However, even though printed books were already quite spread, many writings were never published, or circulated only within closed circles, thus preventing a full diffusion and exchange of ideas. Even key Portuguese books for various reasons never circulated. In my paper, I intend to compare the Portuguese writings on experience with the works of other 16<sup>th</sup> century writings in Western Europe under the light of diffusion and circulation.

NINA VIEIRA

*(CHAM/FCSH/UNL/U. Açores, Portugal)*

**A comparative approach to historical whaling techniques: Transfer of knowledge in the 17<sup>th</sup> century from the Biscay to Brazil**

The inhabitants of the coastal areas of Bay of Biscay were the first to hunt large whales in an organized manner and with industrial purposes. They established the characteristics of the industry for the following centuries both locally and through overseas expeditions. In Brazil, whaling was of significant importance between the 17<sup>th</sup> and the 19<sup>th</sup> centuries. The activity started in 1602 with a whaling concession granted to two Basques partners and expanded to dozens of ports, including Salvador and Rio de Janeiro. This expansion accompanied the market demands, namely for the whale oil that illuminated several regions of Brazil and Portugal and was later exported to the Portuguese Atlantic islands, France, England and Castile. Here, we conducted a comparative analysis of the techniques used both in the place of origin of the Basque-style whaling and in Brazil. As expected, very similar if not identical features were found considering the 10 to 12 meters ‘baleeira’ boat, its symmetric shape and quadrangular sail; the appliances, namely the lances and the harpoon made of steel attached to a wooden stick, built in the same manner and size. Other characteristics of a well-developed activity in Brazil will be presented in the logic of expertise and techniques’ transfer promoted by the Portuguese and Biscayans. Within this broad spectrum discussion, we expect to rise some relevant questions concerning the circulation of knowledge about whales, and the ways of hunting and using them, in the first globalized age of information supported by the intense maritime market and utilization of the oceans’ resources.



ANA CRISTINA ROQUE

(CH-ULisboa)

**Towards a Scientific Approach of Nature: Southern Africa Marine Fauna in the 16<sup>th</sup> century Portuguese registries**

One of the most relevant consequences of the 16<sup>th</sup> century Portuguese travels concerns the knowledge of regions and people till then unknown to the Europeans. Part of this knowledge was expressed in narratives and descriptions where landscape, fauna and flora were carefully and detailed registered. For some regions, such as Southern Africa, these descriptions are not only detailed but are also the first known written records. Taking as example the information on Southern African marine fauna given in the Portuguese 16<sup>th</sup> century Log Books and Diaries of Navigation, and crossing this information with the present ecological and biogeographically data on the region, this paper addresses directly “the question of the European perspective on the processes of scientific knowledge building” by stressing either the importance of these documents at the time, or the possible present day relevance of the information they provide for a better understanding of the biodiversity and the global dynamics of this region.

CRISTINA BRITO

(CHAM/FCSH/UNL/U. Açores, Portugal)

**(Un) Connected Margins:**

**Exotic marine animals in the making of the European Natural History**

Most of the early modern accounts about exotic marine fauna, for the Portuguese Atlantic, did not enter the European natural history treaties and encyclopedia. In those, 15<sup>th</sup> and 16<sup>th</sup> centuries Overseas’ new observations from the aquatic realm are not included. While some African and Brazilian terrestrial animals and birds are comprised in the works of several European authors, the only two marine mammals that are mentioned (and sometimes repeated) are Gândavo’s sea monster – the Tupi igpupiára – and the manatee – the Tupi igoarágoa or the Kikongo ngulu-maza. Sea turtles, seals, cetaceans are sometimes described but just in generic terms (as some did occur in nearby shores) and not describing a new Atlantic species. Authors such as Belon, Rondelet, Pará, Gesner, Aldrovandi did not include Portuguese coeval sources, quotations or authors’ references in their works. For instance, chroniclers Zurara or Duarte Pacheco, or missionaries Anchieta, Léry, Cardim, Gândavo or Galvão, are not mentioned. With a couple of noticeable exceptions, European naturalists relied essentially on Classical authors, such as Aristotle or Pliny, to

describe marine species, and in some cases made use of contemporary examples from European occurrences to add some originality. Here I intend to discuss why Portugal did not make the most of its unique geographic and political position in bringing news, illustrations, remains or marine animals from the Overseas into the natural history circles. It seems that most of the novelty from the Southern Ocean and shores that was being found, described and written (mostly in Portuguese) did not contribute to the Atlantic knowledge production and cultural exchanges that started to strongly develop in this period.

TIMOTHY WALKER

*(University of Massachusetts Dartmouth)*

**Assimilation, Codification, and Dissemination of Indigenous Medical Knowledge within the Portuguese Maritime Empire: 16<sup>th</sup>-18<sup>th</sup> Century Ethno-Botanical Manuscripts**

Portuguese colonial exploration and settlement in during the sixteenth, seventeenth and eighteenth centuries included a significant dimension of medical inquiry, the impact of which resonated throughout the European scientific world and beyond. Early contacts with native peoples and sustained commercial and missionary activity, combined with pragmatic attempts to address threats to the health of European settlers in the tropics, occasioned Portuguese medical-botanical prospecting in Africa, India, the Persian Gulf, China, Malaysia, Indonesia, and South America. Such pioneering experimentation added extensively to human knowledge and understanding of traditional indigenous healing practices and pharmacological botany. Portuguese descriptive works about Asian and South American medicinal plants in particular informed Europeans for the first time about many of the efficacious drugs commonly employed in indigenous healing traditions. Portuguese colonial agents (missionaries, merchants, military officers, medical practitioners, colonial administrators) spread indigenous drugs and information about various native healing methods to Europe, as well as to colonized territories in Africa, Brazil, and across Asia. This paper will examine how that transfer and diffusion of medical knowledge occurred by focusing on descriptive ethno-botanical texts produced in Portuguese colonies during the early modern period, and the worldwide implications of such media for the transfer and evolution of healing practices in the Lusophone world. This paper will explore these texts as conduits of multicultural medical knowledge, wherein European and Indian, African, Malaysian, Indonesian, Chinese and South American concepts about healing blended. By the mid-seventeenth century, practical medicine in Portuguese colonial enclaves had become thoroughly hybridized, with

applied remedies in colonial health institutions (whether state-sponsored or religious) relying significantly on the use of indigenous medicinal substances and methods. The illustrated lecture will explicate these missionary and medical practitioners' texts, their intermingled medical cosmology, and the colonial environment that placed so much importance on the remedies supplied through indigenous healing plants. Further, the presentation will describe various medicinal plants cultivated in Portuguese colonial hospital gardens, their applications and effects, as well as the social context in which the medical practitioners who employed these plants operated.

RAFAEL DIAS DA SILVA CAMPOS  
(CAPES/CHAM-UNL)

**The Luso-Brazilian medical students at Montpellier,  
and the connections of two Atlantic empires**

At the end of 18<sup>th</sup> century, a group of Portuguese Americans went to Montpellier in order to study medicine at one of the most prestigious schools at the time. Their medical concerns are the main point of this paper, due the fact that some of them took part in the local administration after the graduation, and were appointed to suggest solutions to many of public health conditions they were facing. What was the consequence of the life at another empire, along with the mutual interests shared with French and Spanish Caribbean students? Politically, some of them did participated at independence movements against the mother country, but some denounced people related to these ideas. On the other hand, diseases that occurred all over America were studied at the medical school of Montpellier, but more prominently the students went back home with a diverse conception of life, disease and even to the politics applied to their viceroalties and captaincies. Therefore, we intend to analyze possible interactions between students that attended together at the secular medical school, permanently looking at the Coimbra's medical school as a comparative basis. The aspect of a connection between Atlantic empires by means of this group allows us to infer that the local concerns had a more global interconnection.

GISELE CRISTINA DA CONCEIÇÃO  
(CAPES/UP-FLUP/CITCEM)

**Circulation of agents, texts and scientific knowledge between  
Portugal and Brazil in the 18<sup>th</sup> century**

The paper will focus on the circulation of agents, texts and scientific knowledge between Portugal and Brazil. Its purpose is to understand how the natural world of Portuguese America was observed and analysed within the natural philosophical parameters of the period; the patterns of circulation of knowledge and the profile of its producers. Therefore, the material and instrumental aspects of knowledge will not be at the centre of attention, but rather the broader aspects such as networks of contacts, exchanges, and social interactions. The working hypothesis is that these are related to political, social and economic dynamics, both in Portugal and Brazil. The paper will look at connections between the Enlightenment as an intellectual movement, which arrived in Portugal through Crown initiatives, on the one hand, and individual work, expatriate intellectuals, crown military officers, and clerics. The construction of a *Portuguese Age of Enlightenment* in association with the colonial reality will constitute the core subject. To do this, the paper will discuss two case studies. The first concerns the circulation of knowledge among Portuguese agents in European contexts. How did ideas in Portugal circulate through papers and correspondence exchanges? Moreover, to what extent did their criticisms of the crown and their quest for natural philosophical knowledge collected in colonial territories influence the science of that period? The second case study relates to works written in Brazil. The paper will demonstrate how the circulation of scientific knowledge did not occur along a single path – from Europe to the colonies –, but instead, followed multiple ways, involving European agents as well as also those living in colonial spaces. In such cases, the knowledge produced involved a complex network of agents and knowledge, of manuscripts and published works in circulation.

JUNIA FERREIRA FURTADO  
(UFMG)

**A European Republic of Letters and its connections in Portugal**

This presentation discusses the meanings of the concept of Enlightenment and its applicability to the realities of life in Portugal in the early eighteenth century. It challenges the ideas crystallized in historiography regarding a movement confined to the reality of 18<sup>th</sup> century France, or the existence of an atypical and imperfect Portuguese movement. Instead, I present some of the spaces of exchange among the

Enlightenment elites located far apart in different geographical areas, through which ideas travelled, and were exchanged and translated in different national spaces. This new knowledge, of a scientific hue, was then produced in various spaces concomitantly, but differently, and it was the communication between these geographically separate networks of philosophes that allowed these ideas to circulate in different directions. It was knowledge in motion that that circulated continuously and innovated and changed as it moved. Thus, I also challenge preconceived notions of centre and periphery, and go on to discuss the makeup of the Enlightened Portuguese elite. Contrary to usual belief, the reign of Dom João V (1706-1750) in Portugal was characterized by a cultural environment that was on an equal standing with what was called the Enlightenment by contemporaries, and its characteristics were very similar to what took place in France and several European countries at the same time.



## ABOUT THE AUTHORS



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