

Harvard Medical School – Portugal Collaboration in Biomedicine and Health Sciences

**An international collaboration to advance biomedical graduate education and research
and to raise public awareness of how scientific knowledge benefits humankind**

Final Assessment Workshop

Agenda (Preliminary)
10-12 July 2007

Tuesday, July 10: Morning

Meetings with the Portuguese coordinators to prepare for the break-out groups. Contacts with coordinators will be established directly by the HMS team

Tuesday, July 10: 2:30 pm- 6:00pm

Venue: Portuguese Communication Foundation, Museu das Comunicações, Lisboa

Session 1: Perspectives for the *Harvard Medical School – Portugal* collaboration: Establishing the “The HMS-Portugal Consortium for Biomedicine and Health Sciences”

Plenary session to include discussions about scientific areas among Portuguese and HMS faculty, as well as with main public and private actors in the health system, including main Foundations with operations in the health system. Four main activities will be discussed, as follows:

- PhD and MD-PhD programs in biomedicine and health sciences
- Graduate programs in translational and clinical research
- Public content
- Healthcare policy and management education programs

Dinner: 8:00 pm

Wednesday, July 11: 9:30 am- 6:00pm

Venue: Portuguese Communication Foundation, Museu das Comunicações, Lisboa

Session 2: 9:30 am- 1:00pm

Break-out groups:

Room A - PhD and MD-PhD programs in biomedicine and health sciences

Room B - Graduate programs in translational and clinical research

Room C - Public content

Room D - Healthcare policy and management education programs

Lunch: 1:00pm

Session 3: 2:00 pm- 3:30pm

Break-out groups (cont.)

Coffee Break: 3:30pm

Session 4: 4:00pm – 6:00pm

Plenary session to report-back and define next steps

Thursday, July 12: full day

Meetings with the Portuguese coordinators to prepare next steps.

Meetings with private sector and main Foundations with operations in the health system

HMS Faculty involved in the final Assessment Workshop

H. Thomas Aretz, M.D. Vice President, Global Programs at Harvard Medical International
Associate Pathologist, Massachusetts General Hospital, Associate Professor of Pathology,
Harvard Medical School

Tomas Kirchhausen, Ph.D. Professor of Cell Biology at Harvard Medical School, Principal
Investigator at the CBR Institute for Biomedical Research

David E. Golan, M.D., Ph.D. Professor of Biological Chemistry and Molecular Pharmacology,
Professor of Medicine, and Co-Director, M.D.-Ph.D. Program, all at the Harvard Medical
School. He is also an attending Physician at Brigham and Women's Hospital and the Dana-
Farber Cancer Institute.

Adrian J. Ivins Ph.D. is the founding Director of the Harvard Center for
Neurodegeneration and Repair (HCNR), a broad-reaching program to enhance basic and
applied neuroscience research at HMS and its teaching hospitals.

Contact and general Information at HMS:

Amanda Pullen, Ph.D. VP Knowledge Management & Communications, Harvard Medical
International, Executive Director, Giovanni Armenise-Harvard Foundation

List of Participants (to be confirmed)

MCTES:

1. Manuel Heitor – Secretary of State for Science, Technology and Higher Education
2. João Sentieiro – President, Portuguese Science and Technology Foundation, FCT
3. Luis Magalhães – President of The Knowledge Society Agency, UMIC
4. Pedro Ferreira – The Knowledge Society Agency, UMIC
5. Maria Jordão – The Knowledge Society Agency, UMIC
6. Rosália Vargas – Ciência Viva, National Agency for Scientific and Technol.I Culture
7. Ana Noronha – Ciência Viva, National Agency for Scientific and Technological Culture

MS (Participants to be confirmed):

8. Francisco Ramos – Secretary of State
9. Carmo Pignatelli – Secretary of State
10. Maria do Céu Machado – High Commissioner for Health
11. Pereira Miguel – President of INSA
12. Vasco de Jesus Maria – Infarmed
13. Fernando Belo – Infarmed
14. Francisco George - Director-General of Health

Public Hospitals

15. Adalberto Campos Fernandes – President of Santa Maria Hospital
16. Teresa Sustelo – President of the Hospital Centre of Lisboa Central
17. Rui Pato – President of Hospital Centre of Coimbra
18. António Ferreira – President of São João Hospital
19. Sollari Alegro – President of Santo António Hospital
20. Lino Mesquita Machado – President of Braga Hospital
21. João Casteleiro – President of Hospital Centre of Cova da Beira
22. Ricardo Luz - IPO Lisboa

Portuguese Schools of Medicine (Participants to be confirmed):

School of Medicine, University of Lisbon

23. José Fernandes e Fernandes – Director
24. Alexandre Ribeiro – Director of the Pharmacology and Neurosciences Institute

School of Medical Sciences, New University of Lisbon

25. José Miguel Caldas de Almeida - Director
26. Miguel Xavier - Deputy Director

School of Medicine, University of Porto

27. Agostinho Marques – Director
28. Deolinda Lima – Vice-President of Scientific Council

Institute of Biomedical Sciences Abel Salazar, University of Porto

29. António Sousa Pereira – President of Board of Directors
30. Pedro Moradas Ferreira – President of Scientific Council

School of Medicine, University of Coimbra

31. Carlos Robalo Cordeiro
32. Paulo Pereira

School of Health Sciences, University of Minho

- 33. Cecília Leão – Vice-president
- 34. Nuno Sousa

School of Health Sciences, University of Beira Interior

- 35. João Rodrigues Queiroz – President
- 36. José Manuel Calheiros – Vice-president

Associate Laboratories (Participants to be confirmed):

ITQB / IBET / IGC

- 37. Miguel Teixeira – Director ITQB
- 38. Cláudio Soares – Vice-director ITQB
- 39. António Coutinho – Director IGC; also Lisbon Academy of Medical Sciences
- 40. Miguel Soares – IGC

IPATIMUP

- 41. Manuel Sobrinho Simões – Scientific Coordinator
- 42. Leonor David

IMM

- 43. Carmo Fonseca – Coordinator
- 44. Luis Moita

CNC

- 45. Catarina Resende de Oliveira – President, also as President of the Scientific Council of School of Medicine of the University of Coimbra
- 46. Rodrigo Cunha – Director of the Department of Neuropharmacology
- 47. Arsélio Pato de Carvalho

IBMC/INEB

- 48. Alexandre Quintanilha – Director, also as Secretary of the Council of Associate Laboratories
- 49. Mário Barbosa, INEB
- 50. Cunha Vaz, IBIL

Other invitations (Participants to be confirmed):

- 51. Fernando Seabra Santos – CRUP
- 52. António Rendas - CRUP
- 53. João Lobo Antunes – Portuguese Academy of Medicine
- 54. Constantino Sakellarides, Escola Nacional de Saúde Pública, UNL
- 55. Isabel Mota, Calouste Gulbenkian Foundation
- 56. Diogo Lucena, Calouste Gulbenkian Foundation
- 57. Leonor Beleza, Champalimaud Foundation
- 58. Rui Machete, FLAD
- 59. Charles Buchanan, FLAD
- 60. Salvador de Mello, President, José de Mello Saúde (Hospitals and health systems)
- 61. Isabel Vaz, President, BES Saúde (Hospitals and health systems)
- 62. M. Jorge Guimarães, Chairman Alert (ex MNI- Médicos na Internet)

HMS Delegation:

- 63. H. Thomas Aretz, Global Programs at Harvard Medical International
- 64. Tomas Kirchhausen. CBR Institute for Biomedical Research
- 65. David E. Golan, Co-Director, M.D.-Ph.D. Program, Harvard Medical School
- 66. Adrian J. Ivins, Harvard Center for Neurodegeneration and Repair (HCNR)

Annex 1: Clarification of Workshop Goal

Dear Colleagues,

The HMS team wanted to get back to you about the planned workshop in July. We would like to dedicate two days to the discussions of the proposals that we have received, as recently summarized in our letter (see Annex 2 below). The following notes are designed to address comments and questions that we received about the letter and the workshop and its expected outcomes:

In meetings with Secretary of State Manuel Heitor, he has expressed the wish to add the area of Healthcare Policy and Management education and training for healthcare professionals to the already identified areas of MD-PhD and PhD programs, translational and clinical research, and public content.

The workshop is meant to achieve four major goals:

1. To have open discussions and reach agreement on the goals, processes and desired outcomes of the project. One of the crucial areas to assure success will be the creation and definition of efficient governance structures, flexible processes and attainable goals that will assure that the efforts will be sustainable and adaptable. We will be very much interested in your opinions and ideas concerning these issues. We certainly do not want to create a complex and onerous administrative structure, but rather a system that will be supportive and able to adjust to new requirements. This will invariably involve a balance between autonomy to assure experimentation and creativity, and accountability to assure effectiveness, supported by effective communication. The governance structure to be created needs to reflect this philosophy.
2. To have discussions and definitions of processes and first steps in each of the four areas that build on existing strengths in the system. We are presently thinking that each area will be treated as an “autonomous operational unit” of the overall project, which means that each area needs to have structures and processes that support its own needs and goals. As outlined in the previous letter, some of these items include:
 - a. MD-PhD and PhD Programs:
 - i. Governance structure
 - ii. Areas of scientific focus that take advantage of the interactions between the institutions including HMS
 - iii. Criteria for proposal submissions and selections
 - iv. Degree granting
 - v. Student selection
 - vi. Creation of curriculum guidelines and oversight
 - vii. Creation of common experiences, workshops, symposia and platforms
 - viii. Budgets and funds flow
 - ix. Timeline
 - x. HMS role
 - b. Translational and Clinical Research
 - i. Governance structure
 - ii. Understanding of existing programs and efforts
 - iii. Coordination with Ministry of Health and hospitals
 - iv. Requirements for future careers in these fields
 - v. Types of programs (e.g. modules, certificate, master’s degree, continuous professional development)
 - vi. Curriculum development process
 - vii. Creation of common experiences, workshops, symposia and platforms
 - viii. Budgets and funds flow
 - ix. Timeline
 - x. HMS role
 - c. Public Content
 - i. Governance

- ii. Identification of existing efforts and networks for distribution
 - iii. Timeline and development plan
 - iv. Identification of “early successes”
 - v. Budgets and funds flow
 - vi. HMS role
- d. Healthcare Policy and Management Education and Training
- i. Governance structure
 - ii. Understanding of existing programs and efforts
 - iii. Coordination with Ministry of Health and hospitals
 - iv. Requirements for future careers in these fields
 - v. Types of programs (e.g. modules, certificate, master’s degree, continuous professional development)
 - vi. Curriculum development process
 - vii. Creation of common experiences, workshops, symposia and platforms
 - viii. Budgets and funds flow
 - ix. Timeline
 - x. HMS role
3. To identify and catalogue the existing support structures and “cores” that can support the project, in Portugal and at HMS.
4. To further help the HMS team’s understanding of the Portuguese environment in the areas of biomedicine and health sciences as they apply to the above four areas. Since this workshop will represent the final formal meeting in our assessment activities, we want to get as much information as possible.

It is not surprising that there are many common issues – these can be discussed in plenary sessions at the beginning of the workshop. Given the specific foci of the four areas, however, there will need to be break-out groups to discuss each in greater detail. These break-out sessions will be followed by “report backs” to the entire group that should result in agreement on how to move forward. The existing proposals have clearly outlined the interests of various groups and partners around the four key areas and workshop discussions should build on these existing proposals. We will provide a summary of the proposals prior to the workshop, and we would welcome the discussion of additional scientific areas that may not have been highlighted previously. Clearly the discussions about the scientific areas will be crucial, as will be the academic considerations. We wanted to ensure that the discussion would be manageable and asked therefore to have two participants from each institution who could address the scientific content and “academic” areas. There will be ample opportunities for plenary discussions and for exchange of ideas among the various break-out groups.

We hope that this clarifies our intent and goals for the upcoming workshop, and as always, we are happy to have comments and discussions. We will follow up with phone calls prior to the meeting.

Many thanks for your collaboration and patience.

For the Harvard Team, Tom Aretz

Annex 2: Original Letter Sent to Institutions in Response to the Proposals.

The HMS team would like to thank you one more time for the submission of the proposals, which we reviewed last week. The team recently met, and through further discussions created the following summary of the proposals, their perceived intent and the next steps to be discussed in a workshop in July, scheduled for July 10 to 12, 2007 in Lisbon.

Briefly, in all three major areas, the Basic Science Doctoral Programs, Translational and Clinical Research, and Public Content, we received proposals for the creation of national consortia. We also received several proposals for cores and infrastructure, but we would like to treat them for the time being as subsidiary projects within the three major areas in order to make sure that they support the national efforts. When we met, it struck us that all of the proposals could fit into an overarching national consortium that would provide the framework, guidance and governance for the various efforts. For the time being, we are calling this entity "**The National Consortium for Biomedicine and Health Sciences.**" We think this national consortium could hold great promise for strengthening and integrating biomedical and health research and education throughout Portugal, including the country's medical and health science schools, universities, research institutes, and population at large.

At the present time and in concordance with the technical annex, we have identified the following four **Components of the National Consortium:**

1. National PhD and MD-PhD Programs in Biomedicine and Health Sciences

We feel that most of the more "regional" proposals could fit very well under the overall umbrella of the national program, and the details should be discussed at the workshop (see below). Some characteristics of this program may include:

- a. These programs would be open to a limited number of highly qualified students being able to enter through any of the participating institutions
- b. The money would support and follow the candidate and the candidate could move if (s)he so desires
- c. Didactic content would be housed in the individual institutions for the most part but common venues (real and virtual) should be encouraged if they seem to add value
- d. Students can spend part of their time in collaborating HMS institutions if the area of research or subject matter warrant it

HMS could collaborate in the following manner:

- a. Co-development in planning, design and implementation of the national consortium, starting with mission statement, strategic objectives, and governance/management model
- b. Co-development in planning, design and implementation of the doctoral programs, including admissions, faculty selection, faculty development, student advising, curriculum, required and elective courses, laboratory rotations, qualifying examination, thesis research, thesis preparation and defense, teaching/community education requirement (if any), extracurricular activities, and external advisory committees
- c. Co-development in planning, design and conduct of *national and international* workshops and closed conferences (e.g. Gordon conference type) in Portugal [parts can be open to whole scientific community or public if desired]
- d. Co-development in planning, design and conduct of symposia featuring among others the work by the candidates
- e. Visiting faculty, collaborators and mentors
- f. Biomedical research to be complementary with these programs
 - i. High quality research proposals will be requested and funded to support areas of scientific interest and national interest
 - ii. This research is to be collaborative with HMS
 - iii. Investigator, post-doc and student exchanges with HMS
- g. Post-doc programs and support
- h. Post-doc positions in research to support these efforts with positions available at HMS

Topics for discussion for the workshop in July:

1. Agreement on the concept
2. Governance
3. Request for specific research proposals to support and complement the degree programs; the discussions should include **specific items for the expected science collaborations** (e.g. proposal topics, preferably targeting “Frontiers in Human Biology”, budget scale, number of positions per consortium to be supported at both Portugal and HMS labs, etc).
4. Timeline and developmental plan

2. Graduate programs in translational and clinical research

Given the exciting proposal for a national consortium, we felt that this should become a component of the overall Consortium. The team felt that one way to start this would be by creating a core planning group for the programs in translational and clinical research, and have them participate in some of the existing degree and certificate programs at HMS. During the time in Boston, the group could develop a curriculum outline for the national program. The suggested steps are summarized below:

- a. Core planning group to attend appropriate Training (Master’s) Programs in Boston and meet with their leadership
- b. Co-develop concept and curriculum at that time

Topics for discussion for the workshop in July:

1. Agreement on the concept
2. Governance especially relationship to MOH, the hospitals and commercial entities
3. Timeline and development plan

3. Cores in support of the above

As mentioned above, the cores should be in support of the overall endeavor and build on existing infrastructure, much of it is already in place. Below is a short list of possible cores:

- a. Administrative
- b. Data and resources
- c. Technical
- d. Programs and training
- e. Facilities

Topics for discussion for the workshop in July:

1. Agreement on the concept
2. Review of existing infrastructures at the various institutions
3. Governance and coordination
4. Timeline and development plan

4. Public content

We received proposals for the creation of an “open access” information system for all levels of education and the creation of a public portal concerning public health issues. The team felt that these efforts could again be woven into the overall Consortium, and aid in the support of the national programs. Clearly, there will need to be a significant amount of additional content creation to serve the biomedical and health science community, media, teachers at all levels and the 250 Million people living in countries, whose official language is Portuguese. Here are the suggested next steps:

- a. Build on the main proposals and combine/coordinate
- b. Work with Ciência Viva and UMIC to coordinate with other areas of public content development
- c. HMS to provide workshops for media and help create similar workshops for Portugal and European environment

- d. HMS to help co-develop workshops for teachers at all levels of biomedical and health sciences education.
- e. HMS to make available, as requested, already-created content about health and illness for the general public, to be integrated into an open access public portal created by the Consortium (translated into Portuguese and adapted to reflect local medical practice)
- f. HMS to support editing, educational development, platform development, etc., as requested

Topics for discussion for the workshop in July:

1. Agreement on the concept
2. Governance and roles of various parties
3. Timeline and developmental plan
4. Relationship to the Consortium

As mentioned above, these are the team's initial reactions to what we received, and we are eager to have discussions to create a more fleshed out and detailed development plan. We hope to be able to discuss the above issues in the workshop in July focusing especially on the areas of science to be included in the programs. The discussions will be quite practical and need to include specific discussions concerning human resource requirements, budgets, facilities, etc. in order to create a realistic proposal for the future. The team felt that the number of participants should be limited, and should include one person from each institution who could address the academic side and one person who could speak to the specific scientific endeavors. We would like to especially encourage the participation of researchers in the associated laboratories and medical schools who may not have perceived that our original request for proposals applied to them. *The participation and creative input of all the best life-science and health-science researchers and teachers in Portugal will be required if the concept of a national consortium is to be successful.*

Please contact me at anytime to discuss. I will be in Portugal during the week of June 25th, staying at the Tulip Altis Hotel in Lisbon the nights of June 25, 26, and 27. I will be monitoring my email and can be reached by mobile at +1 617 319 2881.

Warmest regards and hoping to see you soon.

For the Harvard Team, H. Thomas Aretz, MD