## Harmonizing Education in Respiratory Medicine in Europe

## The Greek experience of the HERMES project

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The Harmonized Education in Respiratory Medicine for European Specialists (HERMES)<sup>1</sup> project was initiated in 2005 by the European Respiratory Society (ERS), in close collaboration with the Forum of European Respiratory Societies (FERS)<sup>2</sup>, the Section of Pneumonology of the European Union of Medical Specialties (UEMS)3, the European Board for Accreditation in Pneumonology (EBAP)<sup>4</sup> and the Permanent Working Group of European Junior Doctors. The idea of a common position on the optimal duration and content of the training of European pneumonologists had started more than 10 years earlier with a working group from the Pneumonology Section of the European Union of Monospecialists (UEMS)5. The mission of the HERMES initiative is the harmonization of training standards across the European Union (EU) and provision of certificates of qualification in respiratory medicine in the EU, with as its foremost goal the enablement of free access and mobility for European respiratory physicians throughout Europe, and its ultimate goal aim the best possible patient care. For this purpose, the HERMES initiative is developing a range of consensus documents on the education and training of European respiratory specialists (Figure 1). In the initial stages, Phase 1 of the HERMES initiative, a Task Force developed the first widely accepted European Syllabus in adult respiratory medicine. This syllabus is currently available in 20 languages, including Greek<sup>6</sup>. The basic sections of the HERMES Syllabus are presented in Table 1. In Phase 2, this syllabus was further expanded into the Core Curriculum that provided specific recommendations on the training of respiratory physicians in Europe<sup>7</sup>. The next step, Phase 3, involved the establishment of a pan-European examination process to evaluate respiratory physicians throughout Europe and beyond, by an examination process organized by HERMES.

The assessment of respiratory physicians consists of a knowledge-based examination in adult respiratory medicine with multiple-choice questions (MCQs), based on the European Syllabus<sup>6</sup>. The participating candidates must apply to be examined through the ERS website<sup>8</sup>. The evaluation includes 90 MCQs to be answered in 3 hours. Successful candidates are awarded the ERS European diploma. To be eligible to take the examination, the candidate must be a qualified medical practitioner with current full medical registration and national accreditation (or the equivalent) to

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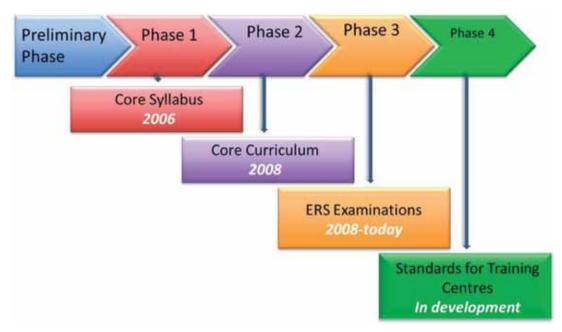


FIGURE 1. Harmonizing Education in Respiratory Medicine in Europe (HERMES) Project Phases.

practice as a specialist in adult respiratory medicine and must be in good professional standing and a member of ERS. Candidates may also take the examination during their training in respiratory medicine. Even physicians who are not qualified respiratory specialists may take the

**TABLE 1.** Sections of the Harmonizing Education in Respiratory Medicine in Europe (HERMES) Syllabus

**Section Content** 

A.	Structure and function of the respiratory system
В.	Knowledge of respiratory diseases
C.	Symptoms and signs
D.	Diagnostic procedures, including monitoring techniques
E.	Treatment modalities and prevention measures
F.	Core generic abilities (ethics, communication, research, teaching, audit, literature appraisal)
G.	Competence in fields shared with other specialties (ICU, HDU)
H.	Knowledge of associated fields relevant to adult respiratory medicine (surgery, radiotherapy)
l.	Further areas relevant to respiratory medicine (epidemiology, statistics, health economics, legal issues)

examination for self-assessment, but in such a case they cannot receive the ERS European Diploma at that time. Successful candidates are advised to re-sit the European examination voluntarily every 5 years, in order to demonstrate up-to-date knowledge. It is mandatory to re-sit the examination every 10 years to maintain the right to hold the European Diploma.

The first European Examination in Adult Respiratory Medicine was organized during the ERS Congress in Berlin in 2008, since when it has been held on the first day of each ERS Congress. The number of participants in the HERMES examination has been steadily increasing since 2008, and 154 candidates from 36 countries took the 2012 examination, of whom 130 were candidates for the European Diploma. Several countries have adopted and incorporated the HERMES examination in their national evaluation systems. In Switzerland, the HERMES examination has been used as the theoretical part of the national exit examination since 2008. In the Netherlands, a local HERMES examination has been conducted as an annual in-training examination for all adult respiratory medicine trainees since 2010. In Austria, the HERMES examination was declared legally equivalent to the national examination in 2010. Russia started holding a local annual in-training and self-assessment examination in 2012. Several other countries, including the United Kingdom, Ireland, Sweden, Spain, Portugal, Malta, Romania, and

Saudi Arabia, strongly support the participation of their trainees in the HERMES examination, and some of these countries are already interested in developing models of collaboration with the ERS for the development of local HERMES examinations. The ERS School organized the first HERMES Summer School in Barcelona in June 2012.

In Greece, the Hellenic Thoracic Society has honored successful candidates in past years and encourages intraining respiratory physicians to take the HERMES examination. The participation and the success rates for Greek candidates have been increasing in recent years and Greece was among the top five countries in the 2012 examination (Table 2). The overall success rate for Greek candidates this year was an impressive 90.9% (10 of 11 candidates successful), compared with the overall 76.2% success rate in the exam. A significant contribution to this high success rate was the 1st Hellenic Thoracic Society HERMES Summer School that was organized jointly with the Respiratory Medicine Department of the University of Crete, 5-8 July 2012 in Heraklion, Crete9\*. In that course, trainees in respiratory medicine from all over Greece participated in a 4 full-day programme of evidence-based preparation for the HERMES examination. The training course was conducted in English.

The ERS, in addition to the European Syllabus and Curriculum, has developed a variety of resources for the preparation of candidates for the HERMES examinations. The first of these is the "ERS Handbook of Respiratory Medicine"<sup>10</sup>, a textbook written by senior specialists in all the areas of respiratory medicine across Europe that follows closely the HERMES Syllabus and the HERMES

**TABLE 2.** The top five participating countries in the 2012 HERMES examination

Country	Number of participants		
India	24		
Switzerland	21		
Portugal	15		
Netherlands	14		
Greece	11		

<sup>\*</sup> Special acknowledgement needs to be made to the Board of the Hellenic Thoracic Society and its president, Professor Konstantinos I. Gourgoulianis, for their contribution to the organization of the 1st Hellenic Thoracic Society Hermes Summer School.

Curriculum. A similar publication on sleep medicine, the "ERS Handbook of Respiratory Sleep Medicine", is also available from the ERS<sup>10</sup>. In 2012, another publication was made available at the ERS Congress in Vienna, the "ERS Handbook: Self-Assessment in Respiratory Medicine"<sup>10</sup>. This book includes 101 MCQs, with corresponding answers and explanatory text, justifying the answers. All the MCQs are in the HERMES diploma format and this resource is useful for the preparation of candidates for taking the HERMES examination.

The ERS School and HERMES task forces are currently moving on beyond the examination process. More recent task forces are now developing assessment methods for sub-specialty areas of respiratory medicine. The HERMES initiative currently involves several projects, including, apart from the curricula and Diplomas in Adult and Paediatric Respiratory Medicine which have already been introduced, the development of curricula, courses and examinations in Respiratory Sleep Medicine, Respiratory Critical Care Medicine, Thoracic Oncology, and Spirometry and Respiratory Physiotherapy. The HERMES Sleep Medicine Syllabus was published in September 2011 and the first Spirometry "Train the Trainer" course took place at the 2012 ERS Congress in Vienna.

The most recent project, Phase 4; of the HERMES initiative is the Accreditation of Training Centres (Figure 1) that will be conducted in close collaboration with the EBAP<sup>11</sup>. The purpose of accreditation within the HERMES initiative is to ensure that all training centre networks in the various specialties of respiratory medicine have the opportunity to gain recognition for their educational programmes in respiratory medicine training. The ERS documents for the accreditation of training centers are currently being finalized and a pilot accreditation phase for training centres is planned to start in early 2013.

The experience to date from the HERMES project has shown that Greece may be an important contributor in this initiative. The active involvement of several respiratory physicians from Greece in the HERMES initiative, in combination with the successful performance of younger colleagues in the HERMES examinations represents the best guarantee for the future involvement of Greece in the harmonized training in respiratory medicine at the European level. At this crucial time-point for Greece, efforts must be focused on improving training in respiratory medicine. Continuing participation in the HERMES project represents a one-way street towards that end.

	2010 Barcelona	2011 Amsterdam	2012 Vienna
Adult HERMES examination			
Diploma participants, all	87	102	130
Greek participants	4	3	11
Successful, all	48	57	99
Greek successful	2	2	10
Success rate, all	55.2%	57.4%	76.2%
Greek success rate	50.0%	66.7%	90.9%

TABLE 3. Participation and success rates in the HERMES European Diploma examination (2010-2012)

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