

ERS School and postgraduate education

Introduction



Key points

- The ERS School's aim is to develop educational programmes and training opportunities in respiratory medicine for physicians and allied health professionals.
- The HERMES (Harmonised Education in Respiratory Medicine for European Specialists) project was set up to establish a European syllabus and curriculum for the practice of respiratory medicine. HERMES now holds yearly examinations in adult and paediatric respiratory medicine.
- Every year, the School organises more than 40 educational sessions during the ERS Annual Congress and six to eight 3-day external courses, intended to provide a deeper understanding of a selected topic.
- A number of ERS educational publications are available: *Breathe*, the *European Respiratory Monograph*, the *ERS Handbook of Respiratory Medicine*, *Self-Assessment in Respiratory Medicine*, and the *ERS Handbook of Respiratory Sleep Medicine*.

The European School of Respiratory Medicine, later named the European Respiratory Society (ERS) School of Medicine after integration into the ERS, was established in 1993 by Professor Jean-Claude Yernault. The School's mission from the beginning has been to develop educational programmes and training opportunities in respiratory medicine for respiratory physicians and allied health professionals. To achieve these aims, the School is run by a democratically elected committee that represents all branches of respiratory medicine. The chair of the School committee is also part of the ERS's core leadership group.

During the early years, the educational activities of the School focused on the organisation of postgraduate (PG) courses held during the annual ERS Congress. Gradually, however, the scope broadened: 'external courses' are now held outside the parameters of the congress; the very successful educational journal *Breathe* (www.breathejournal.org) was launched in 2004; and the School's online e-learning platform contains a huge range of learning resources (www.ers-education.org).

These resources are valuable sources of continuing medical education (CME) and continuing professional development (CPD) for respiratory practitioners worldwide.

“*The mission from the beginning has been to develop educational programmes for respiratory physicians and allied health professionals*”

The HERMES projects

In 2005, the ERS School made a considerable leap forward with the launch of HERMES (Harmonised Education in Respiratory Medicine for European Specialists, hermes.ersnet.org). The HERMES project partners the Forum of European Respiratory Societies (FERS) with the Union Européenne des Médecins Spécialistes (UEMS) for the development of a European syllabus, a European curriculum, criteria for training centre accreditation in Europe, and an examination for qualification as a European specialist in adult respiratory medicine. The first adult respiratory medicine examination was held in 2008. Since then, almost 500 respiratory specialists and 350 trainees have taken the examination. The examination has also been adopted by some European countries as the knowledge-based element of their own respiratory specialist training: Switzerland has used it as the written part of its national certification examination since 2008; in the Netherlands, it has been used as an obligatory in-training assessment since 2010; and Austria recognises it as an equivalent to its national certification.

Further developments came with the expansion of the HERMES project to cover paediatrics. The first European examination in paediatric respiratory medicine was held in 2011.

The School's educational activities for specialist trainees are now developed and carried out using the HERMES methodology, and a 'family' of seven active HERMES projects is now in place (table 1; see also chapter 36). Recently, the HERMES Respiratory Sleep

Adult respiratory medicine
Paediatric respiratory medicine
European Spirometry Driving Licence
Respiratory sleep medicine
Respiratory critical care medicine
Thoracic oncology
Respiratory physiotherapy

Table 1 – HERMES (Harmonised Education in Respiratory Medicine for European Specialists) projects.

Medicine and the HERMES Respiratory Critical Care Medicine syllabi have been published, with the aim of defining the competences required of European respiratory physicians in these fields (further information can be found in chapter 36).

The ERS School web platform

The ERS School website was launched in 2000, and has been continuously developed and expanded (figure 1). It boasts peer-reviewed presentations, journal articles and guidelines as well as a growing range of videos, interactive clinical cases and online courses. The material is organised by topic into 'educational tracks' and users can personalise the site according to their field of interest. Many of the materials on the site are accredited as CME activities by the European Board for Accreditation in Pneumology, and users can earn CME credits (recognised in most European countries) by viewing or taking part in them.

ERS School Courses

The key event in the ERS School year remains the society's annual congress. Every year, the School organises about 20 PG courses, 16 Meet-the-Expert seminars and six Morning Seminars, all of which are held during the annual ERS Congress. These courses are intended to provide basic

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The screenshot shows the ERS e-learning resources website. At the top, there is a navigation bar with links for Home, My Learning Resources, Events, Publications, Guidelines, Topics, and e-learning. Below this is a search bar and a 'Log in as Matt Broadwell | Logout' link. The main content area is divided into two columns. The left column contains a 'MY L1 TOPICS' menu with various respiratory topics like COPD, Tuberculosis, and Diffuse parenchymal (interstitial) lung diseases. The right column is titled 'My Learning Resources - Bookmarks' and features a 'Bookmarks' section with a fingerprint icon and buttons for 'New content', 'Bro', 'New content', 'Upcoming courses', and 'Preferences'. Below this is a 'Current bookmarks' table with columns for Content, Title, and Credits. The table lists several items, including a presentation by H. Ljunggren, a mechanism of asthma development by K-H Carlsted, and a genotype-specific therapy for cystic fibrosis by Jane Davies.

Content	Title	Credits
[Icon]	Presentation by an expert: IK cells in lung inflammation H. Ljunggren (Blackökt, Sweden)	[Icon]
[Icon]	Mechanisms of asthma development in elite athletes K-H Carlsted Breath 2012; 8: 278-284	[Icon]
[Icon]	Genotype-specific small-molecule therapy for cystic fibrosis Jane Davies Breath 2012; 8: 176-186	CME
[Icon]	Complicated pneumonia in children Rishi Pakary, Ian H. Balfour-Lynn Breath 2012; 8: 210-222	[Icon]

Figure 1 – The ERS School website, a personalised view.

knowledge and practical skills in various fields of respiratory medicine. Some include practical facilities and interactive sessions, and popular topics include noninvasive ventilation (NIV), respiratory sleep disorders, rehabilitation, exercise testing, asthma, chronic obstructive pulmonary disease (COPD), interstitial lung disease, lung cancer, lung imaging and pulmonary hypertension. More than 2000 participants attend these events each year.

The School also organises between six and eight 3-day external courses each year. The most popular course topics include interventional procedures, respiratory sleep medicine and NIV. These courses are intended to provide a deeper understanding of the selected topic, with more than half of the time devoted to practical and interactive sessions.

In 2012, the first HERMES Summer School was held to help candidates prepare for the HERMES European examination in adult respiratory medicine. The course programme covered all of the important topics in the HERMES syllabus and included revision of the supporting literature and multiple-choice questions. Similar courses will be organised in the future by national respiratory societies under the supervision and approval of the ERS School.

School publications

The School is very active in the field of educational publication: in addition to *Breathe*, the quarterly educational journal, the *European Respiratory Monograph (ERM)* book series (erm.ersjournals.com), is also published four times a year. Each *ERM* covers a specific area of respiratory medicine, providing clinicians at all levels with a series of comprehensive up-to-date reviews.

In 2010, the first edition of the *ERS Handbook of Respiratory Medicine* was published, and a second edition is being published in 2013. The content of the Handbook follows the HERMES syllabus and curriculum and provides a compact guide to each of the key areas of respiratory medicine. It has been extremely popular, drawing a worldwide readership. Buoyed by this success, the School published two new handbooks in 2012: *Self-Assessment in Respiratory Medicine*, a companion to the adult handbook, comprising clinical scenarios with multiple-choice questions and explanations; and the *ERS Handbook of Respiratory Sleep Medicine*, which closely follows the HERMES respiratory sleep medicine syllabus and covers the causes, diagnosis and management of adult and paediatric respiratory sleep disorders.

Educational research seminars

Recently, the School reasoned that there was a need for critical self-reflection on the current state of educational policies within the ERS, and that the future directions in respiratory medical education needed to be determined. To this end, the first ERS educational research seminar was organised in Dublin in June 2011. Experts in respiratory medicine and medical education, including colleagues from the American College of Chest Physicians (ACCP) and the American Thoracic Society (ATS), met to discuss future trends and challenges in respiratory medical education. The 2-day seminar covered topics such as the evolution of medical education, challenges in educating



respiratory healthcare professionals, the harmonisation of medical education in Europe, knowledge transfer, instructional methods (including simulation and skills training), electronic learning (e-learning) and CME, and personal electronic learning records (e-portfolios). The School is planning to organise further regular educational research seminars to improve the methodology and the quality of its educational resources.

Skills-based, hands-on learning

The School is placing ever-greater emphasis on hands-on, simulator and virtual teaching techniques. This is driven by a number of factors, including a decrease in training time (resulting in reduced exposure to patients), recognition that the acquisition of practical skills matters as much as acquiring knowledge, and the simple fact that patients do not like to be practised on. The most popular School activities currently include 'hands-on' bronchoscopy, cardiopulmonary exercise testing, NIV and ultrasonography courses. A bedside course on COPD management also ran for the first time in 2012, combining theoretical and skills-based training.

Strategic developments in the School

Professional reassessment (revalidation)

In addition to providing educational programmes for respiratory trainees, the School recognises that it has a responsibility to provide continuing medical education for all respiratory physicians, both senior and junior, as professional reassessment and revalidation is becoming increasingly important. Continuing medical education is likely to be a blend of knowledge-based education with face-to-face activities, e-learning, skills-based training and refresher courses. Importantly, physicians need to be able to demonstrate that their learning has influenced and improved their practice and patient care. A particular effort is being made to create these resources, and simplify their management in personalised e-portfolios.

Allied health professionals

The School provides educational programmes for allied health professionals. A major practical initiative of the School has been the establishment of the HERMES European Spirometry Driving Licence, which aims to standardise the accurate performance of spirometry tests and the interpretation of the data they provide. The first 'train-the-trainer' full-day PG Course took place in 2012, with the aim of disseminating good

practice as widely as possible. The HERMES respiratory physiotherapy programme is also now under way and plans to publish its syllabus soon.

The School has a key role to play in this area, as there is an unmet need to provide extensive training opportunities for allied health professionals, both at an international level and in many European Union countries. The School will also seek to provide team-based programmes, adjusted to meet local needs: many, if not most, healthcare professionals now work as part of a multidisciplinary team.

Evaluation of School activities

Rigorous evaluation and the incorporation of feedback are essential to the improvement of the courses offered and their structure and design. The use of a simple questionnaire at the end of a session is no longer sufficient. Consequently, the School has sought the continued input and advice of a medical educationalist and CME experts.

Further reading



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