UEMS activity, EU Pathology Training Requirements, and EU Board of Pathology

Ambrogio Fassina
• Life & Education
• UEMS and ETRs
• Pathology & «so-called» SUB-SPECIALTIES
• EU Board of PATHOLOGY
• Pathology situation
Academic life

La Vie en Rose & Climbing

A lot of LUCK & some skill
Education is not the filling of a pail, but the lighting of a fire

WB Yeats
UEMS

Union Europeenne des Medecins Specialistes
1,600,000 Medical Specialists

Full Members
- National Medical Associations of the 28 EU Member States & of the 3 EU Economic Area Countries

Other members
- 4 Associate Members: Armenia, Israel, Serbia, Turkey
- 4 Observers: Georgia, Lebanon, Morrocco, Iraq, Tunysia

ETR content and format of the assessment
- Existing experience across Europe and beyond
- Consultation with already established European Boards
- Innovative ideas
- Preparatory courses
- Affordable/No fixed failure rate
- Submission to ETRs Committee
- The revised documents submitted to the UEMS Council
- Finally they are defended in the Council and approved (or not...) by the Advisory Board and the NMAs

UEMS-council of European Specialists medical assessments (CESMA)
- UEMS organisation
- 35-European Specialists Assessment Boards
- Share experience and expertise
- CESMA Guidelines for European Examinations
- Pave the way for the future
European Standards in Medical Training

Thanks to the support of its Specialist Sections and European Boards, the UEMS contributed significantly to the improvement of PGT especially through the development of European Curriculum in each medical specialties as well as the elaboration of Training Standards.

Back in 1994, the UEMS adopted its "Charter on Training of Medical Specialists" with an aim to outline the guiding principles for high level Medical Training.

Made up of six chapters, this Charter set the basis for the European approach in the field of Post Graduate Training. With five chapters being common to all specialties, this Charter provided a sixth chapter, known as “Chapter 6”, that each Specialist Section was to complete according to the specific needs of their discipline.

Over the last twenty years, the UEMS Specialist Sections, European Boards, Divisions and MJCs have continued working on developing these European Standards in Medical training that reflects modern medical practice and current scientific findings. In doing so, the UEMS Specialist Sections and European Boards did not aim to supersede the National Authorities’ competence in defining the content of postgraduate training in their own State but rather to complement these and ensure that high quality training is provided across Europe.

For the sake of transparency and coherence, the “Chapter 6” has been renamed as “Training Requirements for the Specialty of X”. This document aims to provide the basic Training Requirements for each specialty and should be regularly updated by UEMS Specialist Sections and European Boards to reflect scientific and medical progress.
Pathology is the branch of medicine involved in the study of diseases. It represents a strong bridge between basic/translational research and clinical medicine; it encompasses every aspect of patient care, from morphologic diagnostic approach as well as additional testing protocols and treatment advice, to cutting-edge genetic technologies. The purpose of Pathology is to diagnose diseases with respect to their classification, aetiology, pathogenesis and their clinicopathological behaviour, and the evaluation of diagnostic and prognostic methods as well as the effects of therapeutic interventions by morphological and functional examination of cells and tissue samples, from gross examination to the molecular lab, including conventional and advanced microscopy and supporting techniques of advanced molecular pathology to demonstrate expression of genes and gene products. The pathologist offers advice and support to fellow clinicians for the benefit of individual patients, the improvement of the quality of diagnostic methods and a better clinicopathological understanding of disease.
Pathology is a specialty in which **time, pre-analytical and technical procedures are critical**, in the everyday routine practice and when during open surgery the modality choice and **the rapid on-site evaluation** of a frozen section require skills and highest scientific preparation of the dedicated Specialist.

**Pathology encompasses knowledge and skills of surgical pathology, autopsy pathology and cytopathology** and additional competences in areas of special interest such as dermatopathology, forensic pathology, neuropathology, paediatric pathology, cardiovascular pathology and paleopathology.

Finally, **patient education and public health aspects** must be also be considered.

Nowadays, is clear how Pathology plays a fundamental role in modern healthcare systems, addressing the **comprehensive diagnostic needs of all patients**, **coordinating and directing** the therapy choices. PS must possess not only the essential scientific knowledge and skills necessary for complete and correct diagnosis, but also the **organizational insights** and capabilities needed to work efficiently in the pathology laboratory/department, cytopathology office, the autoptic and forensic department, additionally joined with **molecular biology facility and other modern technologies** (eg. bioinformatics, biobanking).
Devising a Core and Training Curriculum is rather a difficult task in relation to the variable role and structure of Pathology across Europe, to the new technologies implemented and the intense relationship with clinical, scientific and technical development.

In addition, the status of Pathology varies between being a primary specialty and the several so-called “sub-specialties”, such as Cytopathology, Dermato-pathology, Pediatric Pathology, Neuro-pathology, Forensic, Cardio-pathology, Nephro-pathology, Paleopathology which are not recognized “per se”, but are “integral parts” of Pathology, and for the safety and care of patients necessitate of special additional training program.

This emphasizes the need for common standards for European Training Requirements definition, ensuring high quality care for patients whilst promoting free movement of physicians and the development of the specialty, as well as PS dignity, central position in therapy choice, and last, but not least pertinent economic reward.
Sub-specialties

Pathology is the branch of Medicine dealing with the diagnosis of diseases, which means knowing and doing almost everything in Medicine, except prescribe drugs and therapies, but suggesting the best therapy conduct and scenario to our Colleagues.

In this context, there are obviously several subjects which require special attention and competence, for which it would be reasonable for a Pathology Resident to obtain a formal competency certificate after the final degree, but only in the framework of Pathology Specialty.
Molecular pathology
Molecular approach is a modern method of investigating biological material and as such many different professionals have developed their skills in different subjects. But when it comes to human disease, Pathology has its main, unique and unopposed role, since no one except PS can be considered responsible for the exact definition of the nature of cells/tissue/organ where the molecular investigation has been carried out.

Genomics is a way to do science, not medicine
Harold Varmus
(New York Times, 2010)

What all PS are obliged to know is when and where molecular investigation are required, e.g. for Paediatric genetic, in oncology, in rare diseases.

The continuous development in molecular pathology and the related clinical applications force the PS to a constant update.
• Forensic Pathology and Autopsy
• Paediatric autopsy
• Dermato-pathology
• Cardio-vascular Pathology
• Neuro-pathology
• Paleo-pathology
Cyto-pathology

For all PS the complete knowledge of cytopathology is a mandatory item, since Cytopathology is an essential part of PS curriculum and at least 30-40% of everyday workload is represented by cytologic material. However, in recent years, the scientific progress has defined a clear change from the sixties when PAP TEST was the diffuse screening method, with the need of recruiting non-medical cyto-technologists or other non-medical figures for the smear readings. With the introduction of molecular HPV, PAP test has become a second level diagnostic tools, with no need for screening, but increased level of diagnostic competency.
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<th>Pathology Workload</th>
<th>Pathology as a Profession</th>
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The dearth of pathologists is crucial problem in the poorest countries, where patients lacking a proper diagnosis are often given inappropriate treatments.

In sub-Saharan Africa, for example, there is a single pathologist for every million people, the journal reported.

But the problem isn’t confined to poor countries. China one pathologist/130,000. That compares with 5.7/100,000 in USA, with a prediction of 3.7/100,000 by 2030.

The rise of artificial intelligence and its impact on histopathology

Jeroen van der Laak
Netherlands
As global efforts accelerate to implement the Sustainable Development Goals and, in particular, universal health coverage, **access to high-quality and timely pathology and laboratory medicine (PALM) services** will be needed to support health-care systems that are tasked with achieving these goals. This access will be most challenging to achieve in low-income and middle-income countries (LMICs), which have a disproportionately large share of the global burden of disease but a disproportionately low share of global health-care resources, particularly PALM services. In this first in a Series of three papers on PALM in LMICs, we describe the **crucial and central roles of PALM services in the accurate diagnosis and detection of disease, informing prognosis and guiding treatment, contributing to disease screening, public health surveillance and disease registries, and supporting medical-legal systems.** We also describe how, even though data are sparse, these services are of both insufficient scope and inadequate quality to play their key role in health-care systems in LMICs. Lastly, we identify **four key barriers** to the provision of optimal PALM services in resource-limited settings: **insufficient human resources or workforce capacity, inadequate education and training, inadequate infrastructure, and insufficient quality, standards, and accreditation.**
Key messages

- Pathology and laboratory medicine (PALM) services are cross-cutting, intersectoral, and provide the foundation for safe, effective, and equitable health-care delivery, population health, and global health security.
- Access to PALM services in low-income and middle-income countries is severely inadequate and inequitable.
- The Sustainable Development Goals and universal health coverage cannot be achieved without PALM services.
- Four key barriers to expanding access to PALM services have been identified: insufficient human resources and workforce capacity, inadequate education and training, inadequate infrastructure, and insufficient quality, standards, and accreditation.

The numbers of pathologists in the United States and Canada were adjusted per 100,000 population of the respective countries from 2007 to 2017. In 2007, there were 5.16 and 4.46 pathologists per 100,000 population in the United States and Canada, respectively. In 2017, there were 3.94 and 4.81 pathologists per 100,000 population in the United States and Canada, respectively.

The US medical workforce is facing an impending physician shortage.

This shortage holds special concern for pathologists, as many senior practitioners are set to retire in the coming years. Indeed, studies indicate a "pathologist gap" may grow through 2030.

As such, it is important to understand current and future trends in US pathology.

One key factor is graduate medical education. We found that pathology programs and positions have increased since the 2001 to 2002 academic year, even after adjusting for population growth. However, this increase is much lower than that of total graduate medical education. Furthermore, many pathology subspecialties have declined in population-adjusted levels. Other subspecialties, such as selective pathology, have grown disproportionately.
According to the College of American Pathologists, the mean workload of technical personnel is about 6,433 paraffin blocks/year, with a block/slide ratio of 1:1.8 (2,080 working hours/year) \(^2\). In the case of medical personnel, the Canadian Association of Pathologists considers it is necessary to have one anatomopathologist per approximately 25,000 inhabitants, with a weighted workload of 3,455 Level 4 equivalents (L4E: range 3,362-3,554) per full-time equivalent, and the same values are given by the Royal College of Pathologists and the Medical Group Management Association \(^3\). Some Italian regions have introduced
every pathologist should read up to 1,200 slides/year, corresponding to 2,000-2,500 cases/year; and, in 2013, the Veneto region issued a decree concerning workloads laying down that every multi-specialty unit (UOC) should produce at least 15,200 diagnoses (2,700 histological diagnoses/pathologist or 3,700 cyto-histological diagnoses/pathologist).

The future will see the increasing consolidation of anatomical pathology centres, with the closure of smaller centres or their merger with larger centres, helping clinicians and pathology services alike.

University of Padova
ACTIONS

Urgent attention to

   Workforce
   IT and data
   New technology

Configuration of new/existing services

More specifically
   there will be a centralisation of services
   where will they be located (political vs strategical decision)
   advance warning of the staff to move (political vs strategical decision)

If moving is not a feasible option, maintaining and/or growing a workforce in the location(s) will be at higher costs and inferior efficiency
EU Pathology situation

- Salary
- Career & Gender opportunities
- Responsibility & Insurance
- Workloads & Work hours
- Research & CME
- EU «LEGAL» CERTIFICATION of TITLE
THE PHILIPPINE BOARD OF PATHOLOGY
ANNOUNCES THE DATES OF THE
2018 DIPLOMATE EXAMINATIONS

CLINICAL PATHOLOGY · FEBRUARY 25, 2018 (SUNDAY)
ANATOMIC PATHOLOGY · MARCH 11, 2018 (SUNDAY)
APPLICATION DEADLINE – DECEMBER 9, 2017

FOR PARTICULARS, PLEASE CALL THE PSP SECRETARIAT

UEMS PATHOLOGY ASSESSMENT

American Board of Pathology

https://www.abpath.org/index.php/to-become-certified/requirements-for-certification?id=40
European Board of Thoracic Surgery Part 1 examination 2019

This is to announce that the European Board of Thoracic Surgery Part 1 examination 2019 will be organized at Dublin convention Centre, concurrently with ESTS conference, on Saturday June 8th, 2019, from 9.00 to 12.30.

It will consist of an MCQ testing, with 2 sets of 45 questions scheduled for 90 minutes each, with a break of 30 minutes in-between.

The UEMS section of Thoracic Surgery has decided in January 2019 to evolve towards a 2-part examination, as do most of European Specialty Boards that are UEMS accredited.

Part 1 is a written examination run with MCQ testing theoretical knowledge across the mandatory modules of the Thoracic Surgery Syllabus. Part 2 is an oral examination based on clinical scenarios with standardized questions to be discussed with the jury; it will be organized at a later date.
Please visit UEMS website www.uemsthorax.eu to get more details on the new board regulations approved by UEMS section as of January 2019.

1. Part 1 examination may be taken as **soon as the applicant has graduated for his national specialty examination**
2. Validation of part 1 is mandatory for application to part 2
3. Part 2 may be taken after validation of part 1 and **an experience of independent practice of at least 2 years**.
4. The examination is centred on mandatory modules of the **European Syllabus**
5. Applications must be made according to instructions detailed in the regulations and uploaded via the website. All applications will be submitted to a peer review; **payment of the registration fee** (400 € or less depending on income status of home country) is **mandatory to enter the peer-reviewing process**.
ESP Educational Working Group (Ales Ryska)

Fred Bosman PROGRESS TEST

Andrzej Marszalek
A Fassina

F Bosman, A Marszalek, A Fassina (2019 November)

Structured DataBase of all revised Questions with Macro/Micro Images
Easy accessible Format to submit new questions
Easy accessible server for consultation
Possible structure of EU Board (6 hours)

- 100-300 Questions Multiple Choice (Non-Ready)
- 10 Gross description & Reducing Tech and modalities (Ready)

65% success for the BLACKS

VIRTUAL SLIDES (Ready):
- 5 PAP Gyneco Cyto smears Conventional
- 5 Effusions
- 5 FNA
- 15 Complete surgical Pathology Report (5 Oncology, 5 Reactive/Inflammatory, 2 Autopsy Slides, 3 Molecular Data Interpretation)

80% success for the REDS
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<td><strong>HOW</strong></td>
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<td><strong>WHEN</strong></td>
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The questions asked by the chair were:
What is working? What is not working?
What should be our immediate priorities?
What should the goals be over the next 5 years and how can they be achieved?

**administrative front**, unclear management structure, lack of departmental policy, staff shortage due to suboptimal recruitment and retention, collegiality issues, a difficult financial situation and suboptimal communication were identified as the main issues.

**clinical front**, workload increase and staffing shortage, inefficient workflow with significant backlogs, laboratory underfunding and repeated budget cuts imposed by the provincial government, inadequate specimen grossing due to deficient training and coordination of pathologists’ assistants and the lack of a robust quality assurance (QA) and risk management process were identified as the main issues.

**academic front**, the diminishing graduate education programme, the sustainability of the residency-training programme, the lack of a funded clinical fellowship programme, the reduction of research capacity and output, the lack of structural and financial support for research activities were the major concerns.
• **Vision:** clear, focused, idealistic and realistic, challenging and inspiring, shared preferred future
• **Plan:** Specific (what, who, when), measurable, time-bound, accountable
• **Resources:** infrastructure, finance, process, people
• **People:** recruitment, retention, team building, mentoring/developing, performance appraisal
• **Culture:** collegial, innovative, academic, discipline, fair, transparent, effective communication
Significant increase in the number of graduate students (left) and funding for graduate students (right) in the past 5 years.

As you set out for Ithaka
hope your road is a long one,
full of adventure, full of discovery.

Do not be afraid of Laistrygonians, Cyclops,
of angry Poseidon:
you’ll never find them on your way
as long as you keep your thoughts high,
as long as a rare excitement
stirs your spirit and your body.
Laistrygonians, Cyclops,
wild Poseidon—you will not encounter unless you
bring them along inside your soul,
unless your soul sets them up in front of you.
Hope your is a long road.

May there be many summer mornings
when, with pleasure and joy,
you enter harbors for the first time;
may you stop at Phoenician stations
to buy fine things, mother of pearl and coral,
amber and ebony,
sensual perfumes of every kind—
as many as you can;
may you visit Egyptian cities
to learn and go on learning from their scholars.

Keep Ithaka always in mind.

Arriving there is what you’re destined for.
But do not hurry the journey
Better if lasts for years,
And you will be old by when reach the island,
Wealthy with all you gained on the way,
Do not expect Ithaka to make you rich.

Ithaka gave you the journey.
Without her you would not have set out.

She has nothing left to give you now.
And if you find her poor,
Ithaka did not fool you.

Wise as you will have become,
So full of experience
You will have understood by then
What these Ithakas mean.

Ithaka
Konstantinos Kavafis
1863-1933