## SUPPLEMENT ARTICLE

# Training requirements and recommendation for the specialty of dermatology and venereology *European* Standards of Postgraduate Medical Specialist Training

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## Foreword JEADV European Curriculum Dermato-Venereology

#### Harmonization of Medical Postgraduate Training in Europe

In 1994, the UEMS adopted its Charter on Postgraduate Training aiming providing the recommendations at the European level for good medical training. Made up of six chapters, this Charter sets the basis for the European approach in the field of Postgraduate 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.

Since 2001 at the occasion of the EADV meeting in Munich, the UEMS Section and Board of Dermatology & Venereology has started detailed revision of the document and continuously worked in order to establish a well harmonized curriculum for our medical discipline .This was performed on the basis of extended questionnaires concerning the current situations of training programs for residents in the different member states including those countries from Central and Eastern Europe stepping into the European Union in 2004. The two officially elected UEMS delegates from each member state answered all questions and in consensus updated the status and needs for further harmonization of training procedures.

The definition of our discipline Dermato-Venereology has been finally endorsed by the Council of the UEMS in April 2012 as follows:

Dermatology is the organ specialty that is responsible for the diagnosis, treatment (both medical and surgical) and prevention

of diseases of the skin and subcutaneous tissue, adjacent mucosae, cutaneous appendages as well as skin manifestations of systemic diseases and systemic manifestations of skin diseases. It also encompasses the promotion of good skin health.

Venereology is the organ specialty that is responsible for the diagnosis, treatment and prevention of sexually transmitted infections (STIs) and other medical conditions of the genito-anal tract. It also concerns promotion of good sexual health.

Further on, it was necessary to fill in the content according to the definition of our discipline. The UEMS values professional competence as 'the habitual and judicious use of communication, knowledge, technical skills, clinical reasoning, emotions, values and reflection in daily practice for the benefit of the individual and community being served'. While professional activity is regulated by national law in EU Member States (subsidiarity principle), it is the UEMS understanding that it has to comply with International treaties and UN declarations on Human Rights as well as the WMA International Code of Medical Ethics.

The document published now in the JEADV issue 33, Supplement 4, 2019 derives from the previous Chapter 6 of the UEMS Training Charter and provides definitions of specialist competencies and procedures as well as how to document and assess the final quality of those. For the sake of transparency and coherence, it has been renamed as 'Training Requirements for the Specialty of X'. This document aims to provide the basic European Training Requirements for each specialty and will be regularly updated by UEMS Specialist Sections and European Boards to reflect scientific and medical progress. The three-part

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This is an open access article under the terms of the Creative Commons Attribution-NonCommercial License, which permits use, distribution and reproduction in any medium, provided the original work is properly cited and is not used for commercial purposes. structure of this documents reflects the UEMS approach to have a coherent pragmatic document not only for medical specialists but also for decision-makers at the National and European level interested in knowing more about specific medical specialist training depending on the nature of the particular specialty.

Again all delegates from the Section & Board Dermato-Venereology have worked together with extensive commenting the last years until 2017 and had agreed to publish the final document in the JEADV, which is considered to be the most appropriate to provide updated knowledge within the field of Dermatology and Venereology for the practitioners. During the UEMS meeting of the presidents of all UEMS Sections & Boards of all Medical Disciplines organized in the UEMS organization at 20 October 2017 and at the UEMS Council Meeting of head of delegates from the national institutions of member states on 21 October 2017, the ETR Dermatology and Venereology was approved and endorsed with 28:1:1 and 27:1:1 votes, respectively.

We are convinced that this harmonized curriculum defining the European Training Requirements will help to promote a better and unified training for the future and will foster our discipline via a stepwise approach in implementing its content on the national levels. Furthermore, the content will be reflected within the European Board Examination in Dermatology and Venereology. Residents will be given the chance to test finally their competencies and excellence of the specialistic training. Getting the diploma of this examination hopefully will further help the free movement according to the Bologna process in the EU.

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#### **Preamble**

The UEMS is a non-governmental organization representing national associations of medical specialists at the European level. With a current membership of 34 national associations and operating through 39 Specialist Sections and European Boards, the UEMS is committed to promote the free movement of medical specialists across Europe while ensuring the highest level of training which will pave the way to the improvement of quality of care for the benefit of all European citizens. The UEMS areas of expertise notably encompass Continuing Medical Education, Postgraduate Training and Quality Assurance.

It is the UEMS' conviction that the quality of medical care and expertise is directly linked to the quality of training provided to the medical professionals. Therefore, the UEMS committed itself to contribute to the improvement of medical training at the European level through the development of European Standards in the different medical disciplines. No matter where doctors are trained, they should have at least the same core competencies.

In 1994, the UEMS adopted its Charter on Postgraduate Training aiming at providing the recommendations at the European level for good medical training. Made up of six chapters, this Charter sets the basis for the European approach in the field of Postgraduate 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.

More than a decade after the introduction of this Charter, the UEMS Specialist Sections and European Boards 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.

At the European level, the legal mechanism ensuring the free movement of doctors through the recognition of their qualifications was established back in the 1970s by the European Union. Sectorial Directives were adopted and one Directive addressed specifically the issue of medical Training at the European level. However, in 2005, the European Commission proposed to the European Parliament and Council to have a unique legal framework for the recognition of the professional qualifications to facilitate and improve the mobility of all workers throughout Europe. This Directive 2005/36/EC established the mechanism of automatic mutual recognition of qualifications for medical doctors according to training requirements within all Member States; this is based on the length of training in the Specialty and the title of qualification.

Given the long-standing experience of UEMS Specialist Sections and European Boards on the one hand and the European legal framework enabling Medical Specialists and Trainees to move from one country to another on the other hand, the UEMS is uniquely in the position to provide specialty-based recommendations. The UEMS values professional competence as 'the habitual and judicious use of communication, knowledge, technical skills, clinical reasoning, emotions, values, and reflection in daily practice for the benefit of the individual and community being served'<sup>1</sup>. While professional activity is regulated by national law in EU Member States, it is the UEMS understanding that it has to comply with International treaties and UN declarations on Human Rights as well as the WMA International Code of Medical Ethics.

This document derives from the previous Chapter 6 of the Training Charter and provides definitions of specialist competencies and procedures as well as how to document and assess them. For the sake of transparency and coherence, it 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. The three-part structure of this document reflects the UEMS approach to have a coherent pragmatic document not only for medical specialists but also for decisionmakers at the National and European level interested in knowing more about medical specialist training.

## Definitions

Dermatology is the organ specialty that is responsible for the diagnosis, treatment (both medical and surgical) and prevention of diseases of the skin and subcutaneous tissue, adjacent mucosae, cutaneous appendages and skin manifestations of systemic diseases and systemic manifestations of skin diseases. It also encompasses the promotion of good skin health.

Venereology is the organ specialty that is responsible for the diagnosis, treatment and prevention of sexually transmitted infections (STIs) and other medical conditions of the genito-anal tract. It also concerns promotion of good sexual health.

#### Training requirements for trainees

Competencies required of the trainee A medical trainee is a doctor who has completed their general professional training as a physician and is in an accredited training programme to become a recognized medical specialist; variably known in different countries as an intern, resident, fellow or registrar.

'Learning Outcomes' means statements of what a learner knows, understands and is able to do on completion of a learning process, which are defined in terms of competence (measured or observed as knowledge, skills and professional behaviour).

A specialist (or consultant) in Dermato-Venereology/Dermatology/Venereology is an individual who has undertaken successfully a recognized programme of postgraduate training within Dermatology and/or Venereology. The appointment as a Dermato-Venereology/Dermatology/Venereology specialist (or consultant) is made by an institution within the individual's country of training and takes due note of the satisfactory completion of training as required within that country as related to the domains of knowledge, clinical skills, experience and professional behaviours.

The trainee must have sufficient linguistic ability to communicate with patients to take a proper and correct case history and to explain diagnosis and treatment.

The underlying principle as regards this document is that it promotes high standards of care for patients with dermatological and venereological conditions throughout the European Union and sets the basic requirements in the domains listed above to enable specialists/consultants to move across European country borders for professional purposes. The data that would be provided to a receiving country/employer about a doctor are shown in Appendix 1 at the end of this document.

#### **Catalogue and content of training**

Theoretical knowledge and practical skills According to the definition of the specialties Dermato-Venereology and

Dermatology the trainee should gain deep knowledge of and gain sufficient theoretical and practical experience in the diagnosis and treatment of:

- General dermatology in 'outpatients clinics' and 'inpatients' clinics
- Dermatopathology, incl. biopsy and technical aspects
- · Molecular biology in diagnosis and treatment
- Immunology, with particular reference to immunemediated skin diseases
- · Allergy, diagnostics and treatment
- · Occupational and environmental dermatology
- Paediatric dermatology and genetics
- · Geriatric dermatology
- Dermatologic oncology, diagnostic and treatment procedures
- Photodermatology and phototherapy
- Burns, reactions to physical agents and wound healing
- Bacterial, mycological, viral and parasitic infections and infestations affecting the skin
- Diagnosis and treatment of diseases of skin-adjacent mucous membranes, including proctology
- Vascular pathology of the skin, diagnostic and treatment procedures
- Non-invasive diagnostic procedures, dermoscopy, ultrasound and other measurements of skin function
- Topical and systemic treatments, dermatological formulations and prescribing
- · Pharmacology and skin-related toxicology
- Dermatological surgery, electrosurgery, cryosurgery, lasers, radiotherapy and other physico-chemical treatments (including photodynamic therapy)
- Aesthetic and cosmetic dermatology, including corrective procedures
- Skin care, preventive dermatology and rehabilitation
- · Wound healing, conservative and surgical
- · Psychodermatology and social aspects

According to the definition of the specialties Dermato-Venereology and Venereology the trainee should gain knowledge of and gain experience in the diagnosis and treatment of:

- Epidemiology of sexually transmitted infections (STIs), including HIV infection
- Prevention and control of STIs, including partner notification
- Organization of STI services in public health
- · Sexual history taking and genito-anal examination
- Clinical diagnosis and management of STIs, including systemic manifestations, genito-anal dermatoses and the local and systemic complications
- HIV infection and its complications, management and treatment
- HPV-related lower genital tract malignancies, including diagnosis and management of cellular abnormalities of the uterine cervix

- Common gynaecological, proctal and andrological disorders
- STIs in pregnancy and neonates
- Multidisciplinary management of children with genital infections
- Laboratory diagnosis including serological tests for STIs
- Familiarity with at least one set of management guidelines for STIs (national, European, CDC)
- Methods of contraception
- Sexual health and education, and psychosexual problems

In addition to the items above, the training of Dermato-Venereology/Dermatology/Venereology should contain

- · Epidemiology, data management and evidence-based medicine
- Good clinical practice guidelines and training
- Medical ethics
- Basic principles of health economics
- Practice organization and time management and decision making skills
- Research, clinical and laboratory
- Active participation in clinic sessions, dermatopathology sessions, journal sessions and telematics
- Clinical Scoring Systems
- Teaching and communication skills
- Quality management and critical incidence and failure reporting
- Bedside manners and related aspects
- Ability to work in interdisciplinary teams

The detailed content of Dermato-Venereology/Dermatology/ Venereology Curriculum is shown in Appendix 2.

*Professionalism* To be appointed as a specialist/consultant, an individual should show a level of competence sufficient to allow independent clinical practice and be able to care for patients both in acute and chronic situations. Such a level of performance may vary from country to country and from post to post but the above lists and competencies describe the basic requirements one would expect of a 'European Dermato-Venereologist/Dermatologist/Venereologist'.

In addition to the knowledge and skills in practical procedures detailed above, an applicant for a specialist/consultant post in Dermato-Venereology/Dermatology and/or Venereology would be expected to show evidence of having been personally and continuously involved with the care of patients with as a wide range of common dermatological and/or venereological problems as possible.

A European specialist/consultant in Dermato-Venereology/ Dermatology and/or Venereology should be well informed in research principles: principles and methods of epidemiological research, principles of clinical research, evidence-based medicine, data analysis and medical informatics, laboratory techniques, ethics of clinical and basic research, critical review. A 'European Dermato-Venereologist/Dermatologist/Venereologist' would be expected to demonstrate ethical behaviour, in keeping with the requirements of their country's medical registry/statutory body, and provide evidence to this effect. A 'European Dermato-Venereologist/Dermatologist/Venereologist' would be in good standing with their relevant National Registration Body.

## **Organisation of training**

Schedule of training General aspects of training in Dermato-Venereology, Dermatology and/or Venereology. In countries having a general medicine common trunk training of 1 year, a minimum of 4 years of specialty training is recommended. In those countries without a requirement of a general medicine common trunk training, a minimum of 5 years full-time training in Dermato-Venereology, Dermatology and/or Venereology is neces-

sary. Additional training, beyond the training time after the core curriculum, could also be undertaken thus allowing the development of sub-specialists/superspecialisation. Details of this are not part of the training requirements for the core Dermato-Venereology, Dermatology and/or Venereology training.

The training period in Dermato-Venereology, Dermatology and/or Venereology will be in keeping with EU requirements and in any case sufficient to ensure that a trainee has met all the required educational and training needs. Specific arrangements for the overall training for any individual trainee would be decided locally and be influenced by relevant national requirements. The list of conditions shown above is a guide to the knowledge base required of a specialist/consultant. The clinical experience should encompass all common dermatological and venereological clinical conditions as shown in the list above.

Trainees should have enough time and support to attend local, regional, national and international CME accredited meetings. The ethical codex according to national or international regulations (EACCME) has to be considered.

The trainees should be encouraged to involve themselves in original controlled clinical studies for drug development and medical devices which may lead to presentations and/or publications.

A training logbook for the specialty is necessary. The UEMS will provide a framework of the logbook based on the curriculum of Dermato-Venereology, Dermatology and/or Venereology (Appendix 3).

The national authorities can recognize for training purposes up to one year spent in a recognized centre abroad in an EU or non-EU country provided that the training programme is following the UEMS curriculum or is providing a curriculum acknowledged by the UEMS. For a trainee to be able to apply for a post in another EU country, it would be necessary to present a published curriculum which has been followed by the trainees with details as to how it is known that the curriculum has been followed by both trainees and their trainers. The curriculum would contain details about the required nature and extent of clinical experiences, the methods by which a trainee is supported in their development and how judgements are made about their progress as regards the development of their knowledge and understanding, the progression of their clinical work and their development as a professional.

Support, assessment and evaluation Countries will use assessment strategies appropriate to their needs. Progressively, there will be a move to a common approach determining whether an individual is suitable to be recognized as a 'European Dermato-Venereologist/Dermatologist/Venereologist'.

Trainees will be supported at a number of levels. A trainee's clinical work will be supervised by a trainer. Such an individual already exists in all countries and is known by a variety of titles. The trainer will be responsible for providing the trainee with regular feedback as regards their performance and guidance in matters related to the clinical care that they are delivering. In addition, all training programmes in Dermato-Venereology, Dermatology and/or Venereology will be led in an institution (or in a group or network of allied institutions) by a chief of training programme. The chief of training programme should be responsible for the training programme of the trainee in accordance with the experience of the trainee and the available facilities in the institution or group of institutions. When some facilities are not locally available, it is in the responsibility of the chief of training to make appropriate arrangements (rotation to another training site). There should be sufficient teaching staff to allow adequate monitoring of each trainee. A trainee will meet with their chief of training programme on a regular basis, which typically would be every six months, to discuss their work and progress. Such discussions will take the format of an appraisal with the trainee providing information about how they are progressing, accompanied by documented evidence of clinical engagement and achievement of their learning and training outcomes. The purpose of the appraisal is to enable a constructive discussion about how the learning needs of the trainee should be met. Subsequent appraisals will revisit earlier appraisals to determine progress in achieving these needs. The appraisals are not part of any summative assessment process but are designed entirely to support the trainees.

Assessment of skills in practical procedures will be in the training establishment. Such assessments may include, where appropriate, the use of simulation prior to an assessment in clinical practice using skills laboratory facilities. A comprehensive assessment plan should be established with different types of assessments to be performed at various times and at different levels throughout the training in Dermato-Venereology, Dermatology and/or Venereology. The methods have to promote learning and have to be compatible with the general objectives of the learning outcomes and the content of training. They have to be adapted to the different skill levels of the trainees. The assessment plan should consider a balance between formative and summative assessment and different types of examinations, the use of a portfolio and should make use of specified types of medical examination formats (e.g. DOPS – direct observation of procedural skills, MiniCex – mini clinical examination, OSCE – Objective Structured Clinical Examinations, GRS – Global Rating Scales, OSATS – Objective Structured Assessment of Technical Skills).

Clinical experience will also be assessed by a review of the patients seen by a trainee and for whom the trainee has had a personal responsibility as regards care. Evidence of such engagement will be maintained in a clinical logbook or equivalent. The logbook will be reviewed by the trainee's trainer together with the trainee in a formative manner. This will enable the trainee to see and be involved with the care of an appropriate number and range of patients. The logbook will be reviewed in a summative manner, separately, by the local chief of training together with relevant trainers with whom the trainee has worked.

Professional behaviour would be part of the assessment strategy too and typically a 360-degree multi-source feedback (MSF) would occur at the end of the first or second year of training and at the start of the final year of training. Such assessments may occur more frequently in some countries. The chief of training programme would be central to the discussion and reflection undertaken after each MSF and provide guidance and support in response to comments made by those providing the MSF to a trainee. Additional MSFs would occur if the initial MSF demonstrated a less than adequate performance by the trainee. Local national standards as regards an individual's suitability for clinical practice would determine whether or not a trainee is employable as a consultant/specialist.

In order to be eligible to apply for a post in a country other than the country in which one has trained or to be recognized as a 'European Dermato-Venereologist/Dermatologist/Venereologist', all aspects of the above assessment approaches will need to be completed satisfactorily.

Following a specified training period, trainees will usually become eligible to take nationally implemented board exams to assess the acquired theoretical knowledge. This can be at a supranational level through a written and oral examination, such as is organized by the UEMS European Board of Dermato-Venereology (UEMS-EBDV), which acts as a working body of the UEMS Section of Dermato-Venereology, and acts as a further means of EU-wide standardization in specialty training. This examination samples from the list of core clinical conditions shown above and tests knowledge in the areas of relevant science and clinical practice (diagnosis, investigation and treatment). Trainees are able to retake the summative assessment should they fail it initially.

**Governance** The governance of an individual's training programme will be the responsibility of the chief of training and the institution(s) in which the training programme is being delivered. A trainer will be responsible to the chief of training programme for delivering the required training in their area of practice. Governance of training competencies and contents for now remains a core competency of respective national medical specialty boards. However, UEMS strongly encourages the implementation of structures on a national level that allows for continued reassessment of specialty training programmes in close cooperation with all participants.

#### **Training requirements for trainers**

#### Process for recognition as trainer

Requested qualification and experience A trainer would be a registered medical practitioner and registered too as a Dermato-Venereology, Dermatology and/or Venereology specialist/consultant, which should be an independent specialty recognized by the respective national medical boards. In order to promote harmonization of European training standards, it is also strongly recommended that trainers and trainees should demonstrate additional accreditation on a European level such as provided by examinations offered by the UEMS European Board of Dermato-Venereology (UEMS-EBDV).

They will have satisfied any relevant national requirements as regards accreditation/appraisal/training to be a trainer. A chief of training programme would be someone who has been/is a trainer and who has considerable knowledge and experience of training doctors and who has been practicing the specialty for at least 4 years after specialist certification. There must be additional experienced personal in the training staff for training of practical skills and for subspecialities such as dermatopathology, dermato-oncology, allergology and dermatosurgery.

Trainers and chiefs of training programmes must be in active clinical practise and engaged in training in the training centre or network. Their appointments would be for 5 years in the first instance. In some countries, their work would be reviewed within the training centre or network on a regular basis at staff appraisals (or equivalent) but in any case it would be a requirement that their training activities are reviewed in the fifth year of their appointment. Subject to mutual agreement their position may be continued for a further five years and so on. Recognition across the EU as regards competence to be a trainer despite practitioners coming from different countries and having different routes and extents of training is covered by Directive 2005/36/EC (Paragraph C2/20).

Core competencies A trainer will be:

- Familiar with all aspects of the overall Dermato-Venereology, Dermatology and/or Venereology curriculum as it relates to practice within their country
- Experienced in teaching and in supporting learners
- Skilled in identifying the learning needs of their trainees and in guiding the trainees to achieve their educational and clinical goals
- Able to recognize trainees whose professional behaviour is unsatisfactory and initiate supportive measures as needed
- Trained in the principles and practice of medical education

Trainers should also act as lecturers to a peer audience on a regular basis, attend national meetings and be able to demonstrate appropriate participation in continuing professional development.

#### **Quality management for trainers**

Quality management for trainers remains a core competency of respective national medical specialty boards. It is hoped that trainers and chiefs of training programmes will have their job description agreed with their employer which will allow them sufficient time each week for support of trainees and in the case of chiefs of training programmes, sufficient time for their work with trainers.

It is recommended that a single trainer should have no more than two trainees. The number of trainees would determine the amount of time each week that would be allocated to their support. Trainers will collaborate with trainees, the chief of training programme and their Institution to ensure that the delivery of training is optimal. Feedback from trainees will assist in this regard.

The educational work of trainers and chiefs of training programmes will be appraised typically on no less than an annual basis within their Department/Institution as local circumstances determine.

Educational support of trainers and chiefs of training programmes will be provided by their Department and Institution.

#### Training requirements for training institutions

#### Process for recognition as training centre

Requirement on clinical activities A 'Training Centre' is a place or number of places where trainees are able to develop their competences in Dermato-Venereology, Dermatology and/or Venereology. Such provision may include sites which are condition specific and thus not offer a wide clinical experience such as that provided by a large centre.

The size of the training institution or group of institutions should be such that it has an adequate and high enough number and variety of disorders of in- and outpatients and/or easy access to a sufficient number of inpatient beds and/or day care centre beds. To build up his/her experience, the trainee should be involved in the diagnostic procedures and treatment (medical and surgical) of a sufficient number of inpatients, day care patients and outpatients and should perform a sufficient number of practical procedures of sufficient diversity to fully cover Dermatology and/or Venereology.

Thus, Dermato-Venereology, Dermatology and/or Venereology training may take place in a single institution or in a network of institutions working together to provide training in the full spectrum of clinical conditions and skills detailed in the curriculum. Each participating institution in a network must be individually recognized as a provider of a defined section of the curriculum.

The training of a trainee will be led and managed by a specialist/consultant Dermato-Venereologist/Dermatologist/Venereologist. This specialist will be active in the practice of clinical Dermatology and/or Venereology with personal responsibility for the management of patients with a wide range of dermatological and venereological conditions. Within a training centre, there would be a number of specialist/consultant Dermato-Venereologists/Dermatologists/Venereologists (trainers) who would be able to supervise and personally train a trainee. While the trainer will not manage patients with all the diagnoses listed above, he/she will be able to ensure, by working with the chief of training programme and other local trainers, that the clinical experience of the trainee will prepare them for clinical work as a specialist. The preparation for being a specialist in one country may be different from that needed if the trainee wishes to practice in another country as a specialist.

It is essential that as part of their training trainees will be responsible for caring for patients on both an emergency and routine basis. This may need the involvement of multiple training sites that offer different 'opening hours'. The trainee should be involved in the management of new patients, follow-up of patients and inpatients.

A trainee must have progressively increasing personal responsibility for the care of patients with dermatological and venereological conditions and retain their general medical skills so as to be able to identify patients who present to a Dermatology and/or Venereology service but whose underlying clinical problems are not dermatological or venereological.

The institution should be such as to allow the trainee to carry out his/her training as outlined in the programme of Dermato-Venereology, Dermatology and/or Venereology, as well as to allow appropriate access to other relevant specialties to provide appropriate interdisciplinary interactions and learning objectives. There will be regular multidisciplinary meetings to determine optimal care for patients and such meetings will involve both medical and other healthcare staff. There will be clinical engagement outside of the centre with clinical groups of other related specialities.

Within a Dermato-Venereology, Dermatology and/or Venereology training centre there should be a wide range of clinical services available so that a trainee will be able to see and contribute to the care of all common dermatological and/or venereological problems. In addition, the patient numbers and specialist numbers should be sufficient so that trainees will be able to be instructed and then supervised in the clinical procedures required of a specialist.

Specialist staff appointed to a training centre will have completed all training requirements themselves and will have been trained also in teaching and mentoring trainee staff. Specialists already in post will undertake training, if they have not already completed this, to enable them to support trainees optimally. Such training and maintenance of skills and knowledge in this area will be part of their job plan and subject to appraisal (see above).

It would be unacceptable for a trainee to have only one trainer during their entire training period. It would be more usual for a trainee to have a number of named trainers with whom they work on a day-to-day basis. Each trainer would cover different aspects of a trainee's clinical training but this individual will not be the only person who will provide educational support for a trainee (See above for comments about the chief of training programme and his/her role). In addition to medical staff supporting a trainee's development, it is likely that non-medical members of staff will also be engaged. It would be expected that the specialists in a training centre(s) represent a wide range of dermatological and/or venereological expertise and that such individuals demonstrate that they remain up to date with their clinical practice, knowledge and educational skills.

There is no specific trainee/trainer ratio that is required but it would be unusual for there to be less than three specialists in a training centre or clinical network and for a trainer to have more than four trainees attached to them at any one time. If a trainee moves between a number of centres for their training it is recommended that whenever possible although their trainers may change, their chief of training programme should remain the same. Chief of training programme may also be trainer.

It is not a requirement that a training centre is also an academic centre for Dermato-Venereology, Dermatology and/or Venereology but it is desirable that a training centre would have strong academic links and contribute to research and an aspiration that all training centres will become so involved in the future.

It would be expected that a training centre as described in this document will have been recognized/accredited by the relevant national authority as being suitable for training specialists/ consultants in Dermato-Venereology, Dermatology and/or Venereology. Inspection of training institutions by the national authorities should be conducted at least once every 5 years. Reports from visitations/inspections of training sites can be brought to the knowledge of the UEMS (with due regards to privacy protection). Training inspections should follow the UEMS Charter of Visitations.

When a Dermato-Venereology, Dermatology and/or Venereology department/centre wishes to be recognized as a training centre they will submit a report to the UEMS Section and Board of Dermato-Venereology through their National Representative (s). This will demonstrate that all the necessary educational and training provisions are available in a sustained manner. Subsequently, on a biennial basis a training centre will provide a brief report on its activities, to the Section and Board, again through their National Representative(s). This will demonstrate the maintenance of the education and training provision and allow examples of good practice to be disseminated. There should be appropriate quality assurance systems in place that involve regular objective assessment of the quality of medical care as well as evaluation of the programme and outcomes of training.

Requirement on equipment, accommodation and salary A training centre would have sufficient equipment and support to enable the clinical practice that would be expected of a training centre and thus provide the necessary educational opportunities for trainees.

Trainees would have suitable accommodation and salary for their work and if required to be resident suitable accommodation for this too.

Computing and Information Technology and library resources must be available.

All trainees must engage in clinical audit and have the opportunity to engage in research.

#### **Quality management within training institutions**

#### Accreditation

Training centres would be recognized within their own country as being suitable for being such and for being suitable for the care of patients with a wide range of dermatological and venereological conditions. It would be expected that training centres would be subject to regular review within their country and this would include data relating to the progress of trainees and their acquisition of specialist accreditation.

#### **Clinical governance**

Training centres will, almost certainly, undertake internal audits of their performance as part of the requirements for continuing national recognition/accreditation. It is anticipated that any national evaluation of a training centre's performance will also include the demonstration that it is

- Providing care for patients with a wide range of dermatological and/or venereological conditions
- Providing educational and training support for trainees and others
- Part of a healthcare system that provides immediate access to relevant laboratory and other investigations as well as providing when necessary immediate access to other clinical specialities that may be required by their patients.

The outcomes of such national evaluations will be made available to the Section and Board by the National Representative(s).

Training centres should keep records of the progress of their trainees, including any matters relating to Fitness to Practise or other aspects that might affect a trainee's registration with the relevant national body. The chief of training programme has specific responsibilities in this regard (see above).

#### Transparency of training programmes

It would be expected that a training centre would publish details of the training provision available with details of the clinical service it provides and the specialist and other staff. Such information would include the training programme, the nature of the clinical experiences with which a trainee would be engaged and the support and interaction with the trainer and chief of training programme. There would be a named individual whom a prospective trainee might contact and discuss the programme.

#### Structure for coordination of training

There should be a national (or equivalent) programme for training leading to recognition as a specialist within that country.

The trainee's job plan should allow sufficient time for developmental activities separate from their involvement with clinical service provision.

The job plans of trainers and of chiefs of training programmes should include sufficient time for them to fulfil their educational and training responsibilities.

Training centres will be recognized and approved by the relevant national authority.

To assist a Dermato-Venereology/Dermatology/Venereology specialist moving from one EU country to another, it would be expected that they have satisfactorily completed a training programme in Dermato-Venereology, Dermatology and/or Venereology, thus demonstrating that he/she has the required knowledge, clinical skills and competences as well as having demonstrated appropriate professional behaviours and has been engaged with sufficient amount of clinical work for employment in the post they are seeking. Such accomplishments would be verified both by relevant documents and comments made by referees (Appendix 1).

#### Acknowledgments

Delegates to the UEMS Section & Board Dermato-Venereology with voting rights in 2016: Austria: Längle, Udo, Strohal, Robert/ Belgium: Boonen, Hugo, Lambert, Julien/Bulgaria: Brezoev, Petyo Leandar, Tsankov, Nikolai Konstantinov/Croatia: Skerlev, Mihael, Stanimirović, Andrija/Czech Republic: Arenberger Peter, Ettler Karel/Cyprus: Pallouras, Andreas, Simeonides, Constantinos/ Denmark: Gniadecka, Monika, Vestergaard, Christian/Estonia: Pöder, Airi, Kingo, Külli/Finland: Snellman, Erna, Vaalamo, Maarit/France: Janier, Michel, Reuter, Georges/Germany: John, Swen Malte, Reusch, Michael/Greece: Anthopoulos, Tilemachos, Loukatou, Maria/Hungary: Kémény, Lájos/Iceland: Mooney, Ellen/Ireland: Courtney, Grainne, Ormond, Patrick/Italy: Pellacani, Giovanni, De Pita, Ornella/Latvia: Jākobsone, Ilze, Rubins, Andris/Lithuania: Bylaité-Bucinskiene Matilda, Jasaitiene, Daiva/ Luxembourg: Koch, Patrick/Malta: Boffa, Michael, Scerri, Lawrence/Netherlands: van de Kerkhof, Peter/Norway: Grimstad, Øystein, Rustad, Lisbeth/Poland: Czuwara, Joanna, Czarnecka-Operacz, Magdalena/Portugal: Marques Pinto, Maria Gabriela Vieira Moura, Cecilia/Romania: Rotaru, Maria, Solovan, Caius/ Slovakia: Buchvald, Dušan, Urbanček, Slavomír/Slovenia: Bartenjev, Igor, Potoćnik, Marko/Spain: Estrach Panella, M. Teresa, Gimenez-Arnau, Ana/Sweden: Bradley, Maria, Johansson Backman, Eva Maria/Switzerland: Bloch, Peter H., Hohl, Daniel/ United Kingdom: Barton, Simon, Rustin, Malcom H.A.

## Appendix 1: Basic requirements to move across European country borders for professional purposes

#### Records (logbook) of clinical work and clinical skills

Many trainees already keep a record or have a record kept automatically of patients for whom they have provided care. It is not proposed as a requirement of becoming a European Dermato-Venereologist/Dermatologists and/or Venereologist that any additional record should be kept but when a doctor seeks to gain employment in an EU country other than their own (or the one in which they have been trained if different) they will be required to provide access to appropriate records (logbook) demonstrating the extent and nature of their clinical experience and skills to a future potential employer and any other relevant body (for example a statutory medical body that grants employment rights within a country).

## Independent confirmation of progress of a trainee (or of work as a specialist)

Doctors seeking to gain employment in a country other than their own or the country in which they have been trained will be required to provide references that provide details about:

- 1 The curriculum that the trainee has followed
- 2 The nature of assessments completed by the trainee and the outcomes of any assessments undertaken by him/her
- 3 The outcomes of assessments of a trainee's professional behaviours
- 4 The good standing of the trainee
- 5 The nature of the quality assurance processes by which it is known locally that the quality of the curriculum and its delivery are satisfactory
- 6 As regards a specialist seeking to work in another country, references will be required to contain confirmation regarding an individual's clinical experience and good standing, including outcomes of any assessments of professional behaviours.

A. Basic knowledge and requirements	Prerequisite	Resident has to learn and can perform (obligatory)	Resident needs to learn (obligatory)	Resident is recommended to read and have knowledge (additional)
	Certificate of successfully completed medical undergraduate training (5–6 years) ± general medicine common trunk training (dependent on national regulations) before entering DV-residents specialist training	<ul> <li>general patient-doctor interactions including accurate history taking, communication skills and patient safety</li> <li>counselling techniques</li> <li>computer skills</li> <li>personal training in learning, preparing teaching and assessment techniques</li> <li>literature search (screening, selecting, reading and evaluating)</li> <li>national guidelines</li> </ul>	<ul> <li>ICD-11 catalogue</li> <li>medical ethics</li> <li>health insurance systems and regulations</li> <li>regulations for occupational</li> <li>dermatoses</li> <li>rehabilitation procedures</li> <li>quality of life scores</li> <li>EDF guidelines</li> <li>UV regulations</li> <li>GCP quidelines</li> </ul>	<ul> <li>international guidelines</li> <li>X-ray regulations</li> <li>regulations for transfusions</li> <li>specific QL questionnaires</li> </ul>

### Appendix 2: Detailed Dermato-Venereology/Dermatology/Venereology Curriculum

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Chapter				
B. Basic skills		Resident has to know and can perform (obligatory)	Resident has to know and can perform (obligatory/ single items optional)	Resident has knowledge of and should learn to perform (additional)
	Clinical skills (basic skills can appear again in other chapters)	<ul> <li>knowledge of structure, function and pathophysiology of normal skin and mucosa as well as age-related differences</li> <li>bedside skills such as describing and interpreting primary and secondary lesions</li> <li>specific signs of the skin (Darier's sign, Koebner's phenomenon, Nikolski's phenomenon, Blaschko's lines, dermographism, change of appearance of lesions with skin colour, signs of inherited or paraneoplastic diseases, pattern and quality of skin and hair</li> <li>Wood's light</li> <li>dermoscopy</li> <li>local anaesthesia techniques</li> <li>punch biopsy, spindle biopsy</li> <li>preparation of biopsies for immunological tests and freezing, lupus band test, bullous diseases (split skin technique) basic dermatopathology basic knowledge of histopathological staining techniques, immuno-histochemical and immunofluorescence techniques</li> <li>Tzanck smear</li> <li>examination of genitalia</li> <li>STI smears</li> <li>technique for sampling of smears for microbiological evaluation of parasitic, mycotic, viral and bacterial diseases</li> </ul>	<ul> <li>scoring systems such as PASI, SCORAD, TEN- score, Hurley or Sartorius index, scores for acne, vitiligo, nails, hand eczema, urticaria and angioedema, other important dermatoses and patient reported outcomes</li> <li>nail biopsy</li> <li>scalp biopsy</li> <li>preservation of blood, serum and biopsies for delayed testing</li> <li>preparation and reading of trichograms</li> <li>colposcopy</li> </ul>	<ul> <li>advanced dermatoscopy including videodermoscopy</li> <li>other specific scoring systems</li> <li>regional anaesthesia</li> <li>tumescence anaesthesia</li> </ul>
C. Advanced skills		Resident has to know and can perform (obligatory)	Resident has to know and can perform (obligatory/ single items optional)	Resident has knowledge of and should learn to perform (additional)
	Research skills	<ul> <li>principles and methods of epidemiological research</li> <li>principles of clinical research</li> <li>data analysis and medical informatics</li> <li>laboratory techniques including basic knowledge of molecular genetics</li> <li>ethics of clinical and basic research, critical review</li> </ul>		
D. Emergencies in Dermato- Venereology		Resident has to know and can perform (obligatory)	Resident has to know and can perform (obligatory/ single items optional)	Resident has knowledge of and should learn to perform (additional)
		<ul> <li>acute infections (bacterial, viral, parasitic, arthropods) type I-IV allergic</li> </ul>	<ul> <li>diagnostic (laboratory tests, dermatopathological</li> </ul>	<ul> <li>specific situations (toxic spiders, snake venom, toxic jelly fish</li> </ul>

Chaptor				
Chapter				
		<ul> <li>pseudoallergic conditions</li> <li>DRESS syndrome</li> <li>severe drug reactions</li> <li>urticaria and angioedema</li> <li>TEN, Lyell's, SJS syndromes</li> <li>emergency actions due to paravasal injections</li> <li>erythroderma</li> <li>severe blistering and pustular diseases</li> <li>purpura</li> <li>deep venous thrombosis</li> <li>physical-/chemical/thermic damages of all layers of the skin</li> <li>acute skin eruptions in pregnancy and neonatology</li> <li>anaphylactic shock</li> <li>acute HIV infection</li> <li>paraphimosis</li> <li>genital lymphedema</li> <li>foreign body installation</li> <li>venereal phobia</li> <li>acute epidydimitis</li> </ul>	investigations etc.), therapeutic and surgical- or device-related emergency management to be done or to prepare or to plan in interdisciplinary treatment approach	<ul> <li>specific local/regiona environmental exposures</li> </ul>
		torsion of testicles		
E. Dermato- logical and venereological Infections including HIV infection		Resident has to learn and can perform (obligatory)	Resident has to know and can perform (obligatory/ single items optional)	Resident has knowledge of and should learn to perform (additional)
	Infections of the skin and adjacent mucous membranes related to • bacteria • viruses • fungi • parasites STI manifestations including HIV as well as systemic infections with involvement of the skin organ Principles of infection control	<ul> <li>prevalence, prevention and topical as well as systemic therapy</li> <li>hygiene programmes for prevention of contamination</li> <li>interpretation of serological, molecular and cultural results</li> <li>viral infections (human papillomaviruses (HPV), human herpes viruses (HPV), classical viral infectious diseases of childhood and other viral manifestations including EBV, hepatitis viruses, Parvo viruses and others)</li> <li>bacterial infections and dermatoses induced by staphylococci, streptococci, coryneform bacteria and other gram positive bacteria, gram negative bacteria, chlamydia, mycoplasma, borrelia and other spirochaetes, tuberculosis and other mycobacterial infections (MOTT), leprosy</li> <li>mycotic infections</li> <li>Moutic infections and systemic mycoses, coccidiomycosis,</li> </ul>	<ul> <li>incision and drainage, debridement of abscesses/fistulas/ phlegmonas</li> <li>guidelines for specific laser treatment of HPV infections and other viral papillomas</li> <li>skills to educate patients for good sexual health</li> <li>basic knowledge of indication and type of dermatopathological investigations, interpretation of results and consequences for diagnosis and therapy related to chapter (E)</li> </ul>	<ul> <li>serological and molecular biological diagnostic techniques for STI/ borrelia/mycoses/ HPV diagnostics</li> <li>direct and indirect immunofluorescence of viral, bacterial and mycotic agents</li> <li>diagnosis, management and treatment of leprosy</li> <li>participation in special training programmes for tropical dermatoses</li> <li>specific clinical types patterns and diagnosis of tropical mycoses</li> <li>prevention programmes for HIV infection</li> </ul>

	unded			
Chapter		<ul> <li>nocardiosis, cryptococcosis and others)</li> <li>parasitic infestations (protozoal, intestinal infestations by worms, arthropods)</li> <li>infections through human or animal bites</li> <li>acquisition of parasitic infections of the skin in the subtropics and tropics</li> <li>STI (gonorrhoea, chlamydial infections, non-chlamydial diseases (NGNCU), syphilis, lymphogranuloma venereum, chancroid, granuloma inguinale, HPV)</li> <li>HIV disease and AIDS (HIV early infection, HIV-associated skin diseases including HIV-Kaposi sarcoma, HPV-anal carcinoma, other HPV-induced carcinomas, atypical HIV-related STI's)</li> <li>systemic and other infections of organs of the body with secondary skin involvement</li> <li>techniques for sampling of specimen/probes (smears, aspirations, incision and biopsy) for diagnostics inhouse and for external laboratories including in vitro preparation of specimen from parasites, bacteria, mycotic agents and viruses for culture and STI gram preparation</li> <li>treatment by electrocautery,</li> </ul>		• systemic therapy of HIV (HAART and others)
F. Inflammatory and autoimmune diseases of the skin organ and adjacent tissues and fascia		cryotherapy, laser and other methods Resident has to learn and can perform (obligatory)	Resident has to know and can perform (obligatory/ single items optional)	Resident has knowledge of and should learn to perform (additional)
	Inflammatory, autoinflammatory and autoimmune diseases with involvement of the skin organ including fascia and adjacent mucous membranes	<ul> <li>prevalence, prevention, diagnostic and therapy of diseases mentioned in the chapter (F)</li> <li>pathophysiology of diseases of epidermis, junctional zone, dermis, skin appendages, subcutaneous tissue, fascia, melanocytes</li> <li>recognition and basic knowledge of associated comorbidities to these dermatological conditions</li> <li>topical and systemic therapy including photochemotherapy, biologics, small molecules, cytokines, IV immunoglobulin</li> <li>congenital and acquired disturbances or defects of keratinization</li> <li>psoriasis and related complex</li> </ul>	<ul> <li>dermatopathology according to this chapter (F)</li> <li>recognition and/or diagnosis of psychogenic symptoms, somatopsychic and psychosomatic reactions, psychosocial complications of those diseases</li> <li>basic knowledge of genetics in hereditary diseases of the skin including indication of diagnostic procedures and interdisciplinary consultations for human genetic counselling</li> </ul>	<ul> <li>specific procedures such as extracorporeal immunophotochemo therapy or immunoabsorption (prot A)</li> <li>depigmentation procedures</li> <li>performance of molecular tests (PCF sequencing method: DNA analysis, hybridization etc.) and interpretation of results for further case management</li> </ul>

Appendix 2 Continued			
Chapter			
	<ul> <li>eczema and related complex</li> <li>atopy syndrome and AD</li> <li>lichen planus and lichenoid dermatoses</li> <li>bullous diseases</li> <li>neutrophilic dermatoses</li> <li>urticaria and angioedema</li> <li>scleroses and pseudoscleroses</li> <li>mesenchymal tissue diseases</li> <li>(genetic/non-genetic)</li> <li>deposition diseases</li> <li>lupus erythematosus, myositic disorders, eosinophilic fasciitis</li> <li>granulomatous diseases</li> <li>panniculitic diseases</li> <li>vitiligo</li> <li>leucodermas</li> <li>hyper-/hypopigmentations</li> </ul>	<ul> <li>basic and specific knowledge of indication and type of laboratory tests, interpretation of results and consequences for diagnosis and therapy</li> <li>basic knowledge of indication and type of dermatopathological investigations, interpretation of results and consequences for diagnosis and therapy related to chapter (F)</li> </ul>	
G. Vascular Diseases	Resident has to learn and can perform (obligatory)	Resident has to know and can perform (obligatory/ single items optional)	Resident has knowledge of and should learn to perform (additional)
Primary and secondary non-inflammatory vasculopathies, primary and secondary inflammatory vasculopathies, malformations, immunovasculitis, primary and secondary lymphatic vessel diseases	<ul> <li>chronic venous insufficiency and complications</li> <li>ulcers of venous or arterial origin or microangiopathic or neoplastic origin</li> <li>vasculitis, primary and secondary</li> <li>purpuric disorders of the skin</li> <li>livedo vasculitis</li> <li>thrombophilias</li> <li>stasis and related complications</li> <li>drug/anticoagulant complications</li> <li>primary and secondary lymphedema</li> <li>malformations of blood and lymphatic vessels</li> <li>acquired hemangiomas</li> <li>haemorrhoides</li> <li>polst thrombotic syndrome</li> <li>morbus Mondor</li> </ul>	<ul> <li>different blood coagulation tests</li> <li>functional tests of venous system</li> <li>sampling of specimen and biopsies</li> <li>Rumpel-Leede test (a capillary fragility test)</li> <li>Allen's test (physical examination of arterial blood flow to the hands)</li> <li>tests for thrombosis</li> <li>Doppler assessment</li> <li>Ankle Brachial Pressure Index (ABPI) test</li> <li>physical procedures and medical drug treatment</li> <li>dressings</li> <li>specific topical and systemic wound care</li> <li>banding techniques</li> <li>lymph drainage devices and handling</li> <li>vacuum pump for ulcers</li> <li>surgical wound management</li> <li>biosurgery</li> <li>grafting of ulcers – proctoscopy</li> </ul>	<ul> <li>light reflectance rheography</li> <li>venous plethysmography</li> <li>phlebodynamometry</li> <li>duplex ultrasound</li> <li>digital photo- plethysmography- phlebosurgery (epifascial exheresis of superficial veins, ligation of superficial veins, crossectomy, superficial thrombectomy, radiofrequency technique, endolaser technique)</li> <li>plasmatherapy</li> </ul>

 surgical and non-surgical procedures including βblocker treatment, laser

<b>.</b> .	linded			
Chapter				
			<ul> <li>treatment of vascular lesions</li> <li>basic knowledge of indication and type of dermatopathological investigations, interpretation of results and consequences for diagnosis and therapy related to chapter (G)</li> </ul>	
I. Systemic diseases and the Skin		Resident has to learn and can perform (obligatory)	Resident has to know and can perform (obligatory/ single items optional)	Resident has knowledge of and should learn to perform (additional)
	Complications and manifestations of systemic disorders with involvement of the skin and skin appendages and skin- related mucous membranes (with exception of lymphomas and metastases)	<ul> <li>deposition diseases</li> <li>diabetes mellitus</li> <li>diseases of the thyroid and parathyroid</li> <li>other endocrine disorders with manifestations on the skin organ</li> <li>renal disorders (function, dysfunction, dialysis complications) and syndromes</li> <li>diseases of the liver and syndromes</li> <li>gastro-intestinal disorders including inflammatory bowel diseases</li> <li>diseases of the lung other than allergic origin (i.e. EGPA (eosinophilic granulomatosis with polyangiitis), fibrosis in scleroderma)</li> <li>disturbances of mineral metabolism (calcium, potassium, uric acid/gout, copper, iron etc.</li> <li>neuropathies with involvement of the skin organ and neurocutaneous diseases and syndromes</li> </ul>	•prevalence, prevention, diagnosis and therapy of those diseases and syndromes in interdisciplinary cooperation including functional tests and dermatopathological diagnostics on the skin	portorm (deductiona)
. Dermato- Pharmacology		paraneoplasias Resident has to know and can perform (obligatory)	Resident has to know and can perform (obligatory/ single items optional)	Resident has knowledge of and should learn to perform (additional
	Topical, transdermal and systemic therapies (excluding UV treatment modalities)	<ul> <li>basics and specifics of cutaneous pharmacology in children, adults and seniors (adsorption, absorption, resorption, systemic effects)</li> <li>basics and specifics of cutaneous pharmacology related to systemic drug delivery</li> <li>national guidelines, directives and regulations regarding individual drugs and</li> <li>its indication(s) <b>topical therapies:</b></li> <li>skin compartments – drug/agent actions and interactions</li> <li>adverse drug profiles</li> </ul>	<ul> <li>international guidelines, directives and regulations regarding individual drugs and its indication(s)</li> <li>basic knowledge regarding black box warnings from FDA and EMA and other institutions</li> <li>immunotherapy, targeted therapies and cytostatic agents for treatment of cancer</li> <li>dermatopathology of adverse effects of topical and systemic therapeutic medications</li> <li>use of fillers</li> </ul>	use of botulinum toxin for mimetic corrections

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hapter	
	<ul> <li>construction of vehicles, ointments, creams, lotions, solutions, pastes</li> </ul>
	<ul> <li>construction/function of nanoparticles or liposomes</li> </ul>
	<ul> <li>keratolytic, keratoplastic, rehydrating and relipidizing basic formulations</li> </ul>
	antiproliferative substances
	topical immune agents
	skin protective agents
	<ul> <li>specific formulations/agents/drugs (glucocorticosteroids, calcineurin inhibitors, dithranol, vitamin D and derivatives, retinoids, azelaic acid, benzoyl peroxide)</li> </ul>
	disinfectants
	<ul> <li>anti- infectious agents (antibacterial agents, antimycotic agents, antiviral agents, antiparasitic agents)</li> </ul>
	<ul> <li>antihidrotics including botulinum toxin</li> </ul>
	depigmentation substances
	re-pigmentation substances
	<ul> <li>hair growth promoting and inhibiting substances</li> <li>systemic therapies:</li> </ul>
	effects, side effects and adverse     reactions, interactions
	glucocorticosteroids
	methotrexate
	cytokines
	<ul> <li>biologics and small molecules</li> </ul>
	azathioprine
	mycophenolate mofetil
	fumarates
	retinoids and retinoid-like agents     budrawablarequire
	hydroxychloroquine     non storaidal antiinflammatany druga
	<ul><li>non-steroidal antiinflammatory drugs</li><li>dapsone</li></ul>
	antibiotics
	antiviral drugs
	antiparasitics
	antihistamines
	antipruritic agents
	cytostatic drugs for autoimmune diseases
	IV immunoglobulin
	afamelanotide or others

Chapter				
J. Therapy with physical and chemical agents, UV light and lasers		Resident has to learn and can perform (obligatory)	Resident has to know and can perform (obligatory/ single items optional)	Resident has knowledge of and should learn to perform (additional)
	Treatment with physical and chemical agents, UV lights, lasers	<ul> <li>basic and advanced knowledge about UV- and laser light effects and adverse effects</li> <li>UVA and high dose UVA radiation</li> <li>UVB full and selected spectrum</li> <li>311 nm UVB radiation</li> <li>UVA and UVB radiation sources</li> <li>PUVA (oral, bath, local)</li> <li>photodynamic therapy (PDT)</li> <li>cryotherapy</li> <li>chemoablation</li> <li>PDL</li> <li>selective photothermolysis</li> <li>laser therapy (coagulation, vaporisation, ablation)</li> <li>intense pulsed light therapy</li> </ul>	dermatopathology of adverse effects of physical and chemical agents, etc.	<ul> <li>extracorporeal photoimmunotherapy</li> <li>water jet knife plasmatherapy</li> <li>balneotherapy with and without UV light</li> </ul>
K. Allergies and environmental diseases		Resident has to learn and can perform (obligatory)	Resident has to know and can perform (obligatory/ single items optional)	Resident has knowledge of and should learn to perform (additional)
	Prevalence, prevention, diagnosis and therapy of allergic, pseudoallergic and environmental diseases including occupational dermatoses in relation to the skin and adjacent mucous membranes, toxicology of topical and systemic agents to the skin organ, photodermatology, skin and nutrition/ dietary habits, effects of hyper- or hypoalimentation including skin or mucosal symptoms or dermatoses induced by deficiencies of minerals or of vitamins	<ul> <li>basic knowledge of type I–IV- immune reactions</li> <li>allergy</li> <li>intolerance and pseudoallergy reactions, reactions to placebo \vehicle</li> <li>eczema (contact allergic, toxic/ irritant, atopic, phototoxic/ photoallergic)</li> <li>photodermatoses</li> <li>all types of urticaria and angioedema (allergic, pseudoallergic/intolerance, physical forms)</li> <li>oral allergy syndrome</li> <li>arthropods: type I allergy</li> <li>cutaneous drug reaction and systemic adverse events, i.e. TEN/ Lyell/Erythema multiforme</li> <li>eosinophilia associated allergic skin reactions</li> <li>photodermatology, - acute and chronic UV light damage</li> <li>porphyrias</li> <li>idiopathic and photoaggravated UV and visible light induced dermatoses</li> <li>diseases\injuries provoked by heat, cold, burning and boiling</li> <li>diseases induced by hyper- or hypoalimentation including minerals and vitamin deficiencies</li> </ul>	<ul> <li>diagnosis and therapy of nutrition related diseases of the skin organ and of systemic diseases with nutritional disturbances affecting the skin</li> <li>prevention plans, supervision of patients with structured programmes for professional dermatoses</li> <li>UV sensitivity measurements/ phototesting</li> <li>pruritus scoring</li> <li>interdisciplinary approach to allergic rhinitis and asthma</li> <li>GI-tract allergy including intolerance reactions</li> <li>basic knowledge of indication and type of dermatopathological investigations, interpretation of results and consequences for diagnosis and therapy related to chapter (K)</li> </ul>	<ul> <li>balneotherapy</li> <li>thalassotherapy</li> </ul>

Appendix 2 Col				
Chapter				
		<ul> <li>non-specific and allergen-related tests, elimination and provocation tests including pseudoallergens (preservatives, colouring substances, stabilizers)</li> <li>epicutaneous patch testing (patch test, photopatch test, ROAT (Repeat</li> </ul>		
		Open		
		Application test), atopy patch test)		
		<ul> <li>cutaneous and intracutaneous testing (prick test, prick by prick test, intracutaneous test and subcutaneous infiltration and injections)</li> </ul>		
		<ul> <li>cutaneous provocation tests for inducible chronic urticaria (cold test, ultraviolet test for solar urticaria, friction test etc.)</li> </ul>		
		<ul> <li>Autologous Serum Skin Test (ASST) and Autologous Plasma Skin Test (ASPT) for chronic urticarial</li> </ul>		
		<ul> <li>interpretation of the results of standardized assessments for inducible chronic urticaria</li> </ul>		
		allergen specific immunotherapy		
		<ul> <li>(subcutaneous/oral in children and adults)</li> </ul>		
		<ul> <li>planning and supervision of therapies with different UV/PUVA procedures</li> </ul>		
L. Diseases affecting or deriving from the skin appendages		Resident has to learn and can perform (obligatory)	Resident has to know and can perform (obligatory/ single items optional)	Resident has knowledge of and should learn to perform (additional)
	Primary and secondary	diseases of the sebaceous gland	scars: medical, surgical	curettage of sweat
	inflammatory and non- inflammatory diseases	unit:	and physical methods for	glands
	of sebaceous gland	hamartomas	therapy	<ul> <li>dermabrasion</li> </ul>
	unit, terminal hair	hyperplasia	<ul> <li>including electrocautery, lasers, PDT,</li> </ul>	<ul> <li>melanocytes</li> <li>transplantation</li> </ul>
	follicles, nails, apocrine and eccrine sweat	<ul><li>carcinomas</li><li>endocrine dysfunction</li></ul>	microneedling, injections,	<ul><li>transplantation</li><li>different hair</li></ul>
	glands	syndromes	<ul><li>excisions and transplants</li><li>botulinum toxin infiltration</li></ul>	transplantation
		acne	• botulinum toxin inflitration for	methods
		rosacea	<ul> <li>hyperhidrosis</li> </ul>	
		perioral dermatitis	sweat gland function tests	
		<ul> <li>gram negative folliculitis</li> <li>diseases of the terminal hair</li> </ul>	<ul> <li>sebaceous gland function test</li> </ul>	
		follicle:	dermatosurgery of acne	
		androgenetic alopecia	inversa	
		<ul> <li>autoimmune diseases including alopecia areata</li> </ul>	<ul> <li>basic knowledge of indication and type of</li> </ul>	
		<ul> <li>toxic induced disturbances</li> </ul>	dermatopathological investigations,	
		congenital	interpretation of results	
		• various	and consequences for diagnosis and therapy	
		acne inversa	related to chapter (L)	
		<ul> <li>hyper/hypotrichoses</li> </ul>		
		hirsutism		

Appendix 2 Continued		
Chapter		
	<ul> <li>drugs/cytostatics</li> <li>infectious diseases of the sweat glands:</li> <li>primary and secondary hyperhid including syndromes</li> <li>primary and secondary hypohid or anhidrosis including syndrom</li> <li>hidradenitis/miliaria/primary hidradenitis suppurativa</li> <li>drug-related sweat gland change</li> <li>diseases of the nails:</li> <li>primary congenital including syndromes</li> <li>secondary (psoriasis, lichen pla mycoses, drug-related, tumours)</li> </ul>	drosis Irosis nes ges nus,
M. Dermato- oncology	Resident has to learn and can perform (obligatory)	Resident has to know and can perform (obligatory/ single items optional) Resident has knowledge of and should learn to perform (additional)
medical treatmen of tumor adnexa mucosa chemo- immuno palliative	ions and rehabilitation according to guide ation of • palliative medicine related to ca	international guidelines for diagnosis and treatment of tumours and lymphomas of the skin • participation in tumour boards and presentation of cases elines • dermatopathology according to this chapter (M) h and • has learned to perform local and regional flaps • has learned to perform procedures of free skin transplants • presents cases in the tumour board • knows about basics of psycho-oncologic consultation skin ing of copy gical autery

Chapter	
	neoplasias and malignant tumours of all cell types originating from the skin and adjacent adnexa
•	frequent visceral tumours metastasing into the skin
•	cancer of unknown primary origin
•	endocrine tumours of the body involving the skin or originating from the skin
•	naevi and congenital and other later in life manifesting malformations with abnormal composition of tissues (hamartomas)
•	melanocytic naevi, epidermal naevi, sebaceous naevi, hair naevi, sweat gland naevi, vascular naevi, naevi of the mesenchymal tissue, and hamartomas in association withsyndromes
•	cysts of the skin and of adnexal organs
•	malignant neoplasms on pre-existent benign naevi/hamartomas
•	in situ carcinomas of epidermis
•	in situ carcinomas of adjacent mucosal borders
	malignant tumours of the epidermis (BCC, basal cell naevus syndrome, SCC)
•	benign melanocytic lesions/tumours
•	circumscribed hyperpigmentations
•	melanocytic intraepidermal naevus
•	compound naevus
	blue naevus
	naevus of Spitz
	naevus of Becker
	naevus of Wiesner
	pigmented types of naevi (Ota, Ito)
•	malignant melanocytic tumours (lentigo maligna melanoma, malignant melanoma and other types)
•	benign tumours of the mesenchyme (fibromas, dermatofibroma, keloids and hypertrophic scars)
	malformations and tumours of the muscle and neural tissue (neurofibromas including Recklinghausen's disease, leiomyoma types, neurinomas)
•	tumours of the subcutis (lipomas and subtypes, liposarcomas)
•	tumours of the skin adnexal organs (originating from the hair follicle, sweat glands, sebaceous glands including malignant adnexal tumours)

Chanter				
Chapter				
		<ul> <li>vascular tumours (benign infantile capillary hemangiomas, neonatal hemangiomatoses, disseminated hemangiomatoses, congenital vascular tumours, vascular malformations, glomus tumour, malignant vascular tumours including Kaposi's sarcoma types, angiosarcomas, Stewart Treves syndrome)</li> <li>syndromes associated with hemangiomas</li> </ul>		
		<ul> <li>cutaneous lymphomas and pseudolymphomas (primary cutaneous lymphomas (T-cell type, B-cell type), involvement of nodal lymphomas on the skin (T cell, B cell and mixed), pseudolymphomas)</li> </ul>		
		<ul> <li>dendritic/histiocytic cell proliferations of benign and malignant origin</li> </ul>		
		cutaneous paraneoplasias		
		<ul> <li>metastases of nodal lymphomas and histiocytic/dendritic cell infiltrations into the skin of non-cutaneous origin</li> </ul>		
N. Diagnostic procedures, tests for functions of the skin's immune system, vascular system		Resident has to learn and can perform (obligatory)	Resident has to know and can perform (obligatory/ single items optional)	Resident has knowledge of and should learn to perform (additional)
	Visual diagnostic methods, ultrasound, dermatopathology,	<ul><li>dermatoscopy</li><li>digital dermatoscopy</li></ul>	<ul> <li>interpretation of results of functional tests and</li> </ul>	duplex technique for
	skin and laboratory test procedures in allergology, STI, skin infections and others	<ul> <li>indications for functional and invasive techniques to investigate blood vessels</li> <li>dermatopathological investigations:</li> <li>techniques of biopsy</li> <li>basic knowledge of histopathological staining techniques, immuno-histochemical and immunofluorescence techniques</li> <li>split skin technique</li> <li>mycologic basic tests for diagnostics of dermatophytes, yeasts and moulds, KOH preparations, culture</li> </ul>	<ul> <li>invasive techniques for vessels of the veins and arteries</li> <li>ultrasound A + B mode of skin, subcutis and lymphnodes</li> <li>differentiation of tumours and metastases</li> <li>tumour thickness (10-20 MHz ultrasound)</li> <li>Doppler technique for peripheral vessel function</li> <li>suction blister test</li> <li>catalogue of test material</li> </ul>	<ul> <li>mography laser flux measurements</li> <li>fluorescence microscopy for bacteriologic, viral and mycological investigations</li> <li>measurements of total IgE, specific Ig</li> </ul>
	skin and laboratory test procedures in allergology, STI, skin	<ul> <li>indications for functional and invasive techniques to investigate blood vessels</li> <li>dermatopathological investigations:</li> <li>techniques of biopsy</li> <li>basic knowledge of histopathological staining techniques, immuno-histochemical and immunofluorescence techniques</li> <li>split skin technique</li> <li>mycologic basic tests for diagnostics of dermatophytes, yeasts and</li> </ul>	<ul> <li>vessels of the veins and arteries</li> <li>ultrasound A + B mode of skin, subcutis and lymphnodes</li> <li>differentiation of tumours and metastases</li> <li>tumour thickness (10-20 MHz ultrasound)</li> <li>Doppler technique for peripheral vessel function</li> </ul>	<ul> <li>plethysmography techniques</li> <li>digital photoplethys mography laser flux measurements</li> <li>fluorescence microscopy for bacteriologic, viral and mycological investigations</li> <li>measurements of total IgE, specific Ig histamine, tryptase,</li> </ul>

Chapter				
		<ul> <li>subcutaneous infiltration and injections</li> <li>atopy patch test</li> <li>autologous Serum Skin Test (ASST) and Autologous Plasma Skin Test (ASPT) for chronic urticarial</li> <li>read out of standard tests in allergology</li> <li>epicutaneous test procedures including photopatch testing</li> <li>hair plug test</li> </ul>	<ul> <li>autologous plasma skin test</li> </ul>	<ul><li> plethysmograpy</li><li> chromametry</li><li> confocal microscopy</li></ul>
O. Dermato- Endocrinology		Resident has to learn and can perform (obligatory)	Resident has to know and can perform (obligatory/single items optional)	Resident has knowledge of and should learn to perform (additional)
P. Corrective, cosmetic and	Endocrine disturbances of skin appendages such as hair and sebaceous glands, systemic endocrinopathies manifesting at the skin site	<ul> <li>senescence of male and female</li> <li>endocrine functions of female and male</li> <li>adults</li> <li>menopause/andropause</li> <li>endocrinological function in infants and adolescents metabolic syndrome</li> </ul> Resident has to learn and can perform (obligatory)	<ul> <li>conservative treatments</li> <li>laboratory and molecular tests</li> <li>genetic counselling together with human geneticists</li> <li>Resident has to know and can perform (obligatory/</li> </ul>	tests for: <ul> <li>erectile dysfunction</li> <li>infertility</li> <li>ejaculation disturbances</li> <li>intersexuality</li> </ul> Resident has knowledge of and
aesthetic dermatology	Procedures that focus on improving the appearance, colour, texture, structure, or position of bodily features through the treatment of normal and diseased skin	<ul> <li>basic and specific knowledge about methods and procedures on improving the condition of normal and diseased skin,</li> <li>complications of corrective, cosmetic and aesthetic procedures, prevention and management</li> </ul>	<ul> <li>use of botulinum toxin for hyperhidrosis,</li> <li>microneedling,</li> <li>use of fillers,</li> <li>use of physical and chemical agents (chemical peels, photodynamic therapy (PDT), UV lights, lasers, PDL, cryotherapy)</li> </ul>	<ul> <li>should learn to perform (additional)</li> <li>use of botulinum toxin for mimetic corrections, use of physical and chemical agents (external lipolysis (heat/cold/ ultrasound), intense pulsed light (IPL), radiofrequency, infrared and other devices),</li> <li>dermabrasion,</li> </ul>
				<ul> <li>phlebectomy,</li> <li>sclerotherapy,</li> <li>different hair transplantation methods</li> </ul>

Appendix 3: Guidelines for Logbook for registration of training activities in dermatology and venereology: report from the Board of Dermatology and Venereology (JEADV 2007, 21, 850-851)

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#### **Recommended contents of a Logbook**

*Introduction* The Logbook will be supplied and explained to the trainee by the educational supervisor at the beginning of the training period.

*Quantity* The trainee should record his or her training experience in terms of quantity, i.e. numbers of clinics, patients managed, surgeries, teaching, courses attended, etc.

*Reviews* The Logbook will be reviewed at regular intervals by the trainee's educational supervisor. The educational supervisor has to report to an accredited assessment group.

*Evaluation* In-training evaluation should be carried out at least on an annual basis to ensure that the trainee is making progress. Ideally there will be external validation.

The final or penultimate year in-training evaluation must have external validation.

*Updating the Logbook* Regular review and updating of the Logbook should be carried out every year.

#### **Content of the Logbook**

Background documents

- UEMS and national requirements for training centre and accreditation
- National recommendations about final assessment, for example examinations
- National recommendations on the duties and responsibilities of the educational supervisor

*Record of training* It is recommended that the trainee records details of his or her activity at regular intervals and that the supervisor can closely follow his or her progress.

Different methods may be adopted, for example the total number of half-day clinics, overall percentage of time or number of patients.

*Records of clinical activities* Examples of clinical activity to be recorded should include the following although inevitably these will vary from country to country and whether a Dermato-Venereology or a dermatology programme:

- · General dermatology
- Dermatological surgery
- Allergology and occupational dermatoses
- Photodermatology
- Dermatopathology

- · Paediatric dermatology
- · Infectious diseases related to the skin
- Inpatient care
- · Vascular pathology
- Sexually transmitted infections including HIV
- Dermato-oncology
- Dermatological techniques: lasers, dermatoscopy, tele-dermatology, PDT
- · Aesthetic dermatology

*Records of educational activities* Examples of educational activities to be recorded may include:

- Training courses
- Publications
- Papers presented
- Meetings attended
- · Experience in clinical trials
- Research experience
- Teaching experience
- Audit
- Medical ethics

Assessment It is recommended that each trainee is assessed on an annual basis. To aid this process, each item listed in the programmes of dermatology and venereology (Chapter 6) should be considered and may be recorded under the following headings:

- 1 No knowledge trainee has no specific knowledge of the subject.
- 2 Theoretical knowledge trainee has read about and/or attended lectures on the subject.
- 3 Theoretical knowledge and observing experience trainee has been with experienced teachers, witnessing procedures or patient care.
- 4 Experience under supervision trainee has carried out procedures or patient care in the presence of a teacher.
- 5 Experience without direct supervision trainee has appropriately carried out procedures without direct supervision.

For the UEMS European Section and Board of Dermato-Venereology

Care ale

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