

Association internationale sans but lucratif

International non-profit organisation

AVENUE DE LA COURONNE, 20 BE- 1050 BRUSSELS www.uems.net T +32 2 649 51 64 F +32 2 640 37 30 info@uems.net

UEMS 2014/xx

Training Requirements for the Specialty of Rheumatology

European Standards of Postgraduate Medical Specialist Training

Preamble

The UEMS is a non-governmental organisation 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, Post Graduate 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 Post Graduate Training aiming at providing the recommendations at the European level for good 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.

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

PRESIDENT: DR ROMUALD KRAJEWSKI

SECRETARY-GENERAL: DR EDWIN BORMAN

TREASURER: DR GIORGIO BERCHICCI

LIAISON OFFICER: DR ZLATKO FRAS

Association internationale sans but lucratif — International non-profit organisation

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 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". 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 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 medical specialist training.

.

¹ <u>Defining and Assessing Professional Competence</u>, Dr Ronald M. Epstein and Dr Edward M. Hundred, Journal of American Medical Association, January 9, 2002, Vol 287 No 2

Association internationale sans but lucratif — International non-profit organisation

I. TRAINING REQUIREMENTS FOR TRAINEES

1. <u>Content of training and learning outcome</u>

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 recognised 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 rheumatology specialist (or consultant) is an individual who has undertaken successfully a recognised programme of postgraduate training within rheumatology. In addition, such individuals typically, but not universally (this depends at present on differing requirements between countries) will have undertaken postgraduate training of a general nature immediately following their completion of undergraduate studies and a further period of more advanced training in general internal medicine. The appointment as a rheumatology 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 underlying principle as regards this document is that it promotes high standards of care for patients with rheumatological 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 is shown in Appendix 1 at the end of this document.

a. Theoretical and clinical knowledge

The required knowledge base is determined by the cognition of basic sciences and clinical conditions of which a specialist/consultant would be expected to recognise and have knowledge.

Knowledge of basic sciences includes

- Anatomy and biology of musculoskeletal tissues
- Immunology
- Biomechanics of bones, joints and muscles
- Neurobiology of pain

Association internationale sans but lucratif — International non-profit organisation

The care of patients with these various conditions would not necessarily be provided by one specialist/consultant but all such senior rheumatologists should have some understanding of all of the conditions listed. The list of conditions which provides the basis of the European Rheumatology Curriculum is shown below and in appendix 2. Trainees may well have seen patients with conditions not listed and this would be reflected in their portfolio/record of training or equivalent documentation.

List of conditions (see appendix 2 for detailed list)

Rheumatoid Arthritis

Spondyloarthritis

Systemic lupus erythematosus and antiphosholipid syndrome

Systemic sclerosis

Other systemic connective tissue diseases

Vasculitis and related diseases

Infectious arthritis

Disorders of the locomotor system associated with primarily metabolic, endocrine or haematological diseases

Crystal-associated diseases

Endocrine-associated diseases.

Rheumatic syndromes associated with haematological-associated diseases.

Bone and cartilage disorders

Metabolic bone diseases

Hereditary, congenital, and inborn errors of metabolism associated with rheumatic syndromes

Disorders of connective tissue

Osteochondrodysplasias

Inborn errors of metabolism affecting connective tissue

Storage disorders

Immunodeficiency

Auto inflammatory syndromes including

Non-articular and regional musculoskeletal disorders:

Axial syndromes

Regional musculoskeletal disorders affecting all joints

Disorders affecting specific joints

Internal derangements

Biomechanical/anatomic abnormalities associated with regional pain syndromes

Overuse rheumatic syndromes

Sports medicine

Entrapment neuropathies

Neoplasms and tumour-like lesions

Association internationale sans but lucratif — International non-profit organisation

Malignancy-associated rheumatic syndromes

Muscle diseases

Miscellaneous rheumatic disorders

Intermittent arthritis

Rheumatic disease in the geriatric population

Rheumatic disease in the pregnant patient

Rheumatic syndromes in renal insufficiency and dialysis patients

Uveitis and scleritis

Paediatric musculoskeletal conditions:

These conditions define the basis of the core curriculum. By the time an individual is appointed as a specialist/consultant he/she would be expected to have the following attributes:

- Knowledge and understanding of the relevant and topical underpinning medical sciences, population health sciences, pathophysiology and principles of management and care of patients with any of the core clinical conditions
- Ability to indicate and interpret diagnostic testing: laboratory tests, diagnostic imaging techniques, test performance characteristics.
- An understanding of the modes of action and potential adverse effects of therapies and experience in advising patients about the risks and benefits of such therapies
- Ability to analyse and utilise research findings in rheumatology so that their clinical practice is, as far as possible, based upon evidence
- Be able to provide evidence that they are maintaining their general medical as well as their rheumatological knowledge sufficient to ensure a high standard of clinical practice
- An understanding of the healthcare system(s) within their country of training
- Be prepared for their role as future clinical leaders
- Be able to be an effective member and a leader of a multidisciplinary team.

b. Practical and clinical skills

Key skills to possess in this specialty

Trainees prior to appointment as a specialist/consultant should have mastered the following

Association internationale sans but lucratif — International non-profit organisation

practical procedures.

Technical skills

Aspiration of joints and bursae

Injection of joints and soft tissue

Synovial fluid analysis under polarized light

Interpretation of musculoskeletal imaging, bone scintigraphy and bone densitometry

Optional skills

Mastery in the following practical procedures is considered **optional** and may be the subject of specific regulation at a national level:

Biopsies of relevant tissues and organs (for example: synovium, skin, subcutaneous fat, minor salivary glands, bone, muscle, nerves, kidney, temporal artery)

Bone densitometry

Musculoskeletal ultrasound

Capillaroscopy

Electromyography

Arthroscopy

Injection techniques under imaging guidance

Radioactive or chemical synoviorthesis

Joint lavage

Trainees should demonstrate competence of the required 'Technical Skills' prior to being appointed as a specialist/consultant. It may be that in some countries specialists will be required to demonstrate the retention of such skills for reaccreditation purposes.

It should be noted that different countries and different specialist/consultant posts may require evidence of skills in practical procedures additional to those shown above.

c. Competences

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 Rheumatologist'.

Association internationale sans but lucratif — International non-profit organisation

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

A European specialist/consultant in Rheumatology 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 Rheumatologist' 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 Rheumatologist' would be in good standing with their relevant National Registration Body.

2. Organisation of training

a. Schedule of training

A duration of 4 years of core rheumatology training is recommended. It is recommended that training in rheumatology should be preceded by two years of training in internal medicine (after which the trainee should have acquired appropriate knowledge, training and experience in the care of general and acute medical conditions). Training, beyond the core, could also be undertaken thus allowing the development of sub-specialists. Details of this are not part of the training requirements for the core rheumatology training.

One of the core rheumatology four years might be undertaking a Masters programme in Rheumatology.

The training period in rheumatology 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 rheumatological clinical conditions as shown in the list above.

For a trainee to be able to apply for a post in another EU country it would be necessary for there to be 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.

Association internationale sans but lucratif – International non-profit organisation

b. Curriculum of training

The curriculum is outcomes focussed but with sufficient flexibility to allow personal development distinguished by the needs of the individual, the centre in which they are training and the country where this is occurring. Training should include teaching skills for generic competences and rheumatology specific competences.

Thus, the curriculum would be based on the following principles. A European Rheumatologist would:

- Be a pluripotent specialist and a multi-system disease expert
- Be competent in history taking, physical examination, management and continuing care of patients with common and a number of other rheumatological conditions
- Communicate effectively with patients, their families and with professional collaborators
- Practise evidence-based care
- Practise cost-effective care
- Understand the nature of and degree of risk taken in their clinical practice
- Maintain the quality of their practice by being aware of developments in the subject
- Undertake multi-disciplinary team (MDT) work
- Provide clinical leadership also ability to be led and work as part of a multidisciplinary team
- Demonstrate a lifelong commitment to reflective learning
- Promote the health and well-being of individual patients, communities, and populations
- Have an understanding of specialty-based Public Health
- Teach and support trainees
- Be committed to the health and well-being of individuals and society through ethical practice, profession-led regulation and high standards of personal behaviour and clinical practice
- Have a portfolio of evidence that they have achieved the above goals; especially should they wish to seek employment in a country different from the country in which they trained.

Different countries will have different approaches to achieve these outcomes but the evidence that they have been achieved should be increasingly of a homogeneous nature that facilitates the learning and experiences of trainees, the engagement of clinical supervisors and ease of recognition of progress and achievements across EU member countries. In addition, such an approach will help provide surety to the public and to individual countries that the training has been of an appropriate standard and that the performance of doctors is likewise of a satisfactory standard.

c. Assessment and evaluation

Association internationale sans but lucratif — International non-profit organisation

Countries will use assessment strategies appropriate to their needs. Progressively, there will be a move to a common approach to determining whether an individual is suitable to be recognised as a European Rheumatologist. Thus, there will need to be an assessment of knowledge which would be through a written examination.

This examination would sample from the list of core clinical conditions shown above and test knowledge in the areas of relevant science (basic medical and clinical sciences, population health sciences and behavioural sciences) and clinical practice (diagnosis, investigation and treatment). This testing will be in a 'best of five' format.

These tests would be delivered across Europe on a regular basis. There will be an assessment of knowledge (formative) after one or two years of training and a second (summative) assessment towards the end of the period of training. Trainees will be able to retake the summative assessment should they fail it initially.

(Such cognitive testing does not easily allow an exploration of an individual's behaviour in complex and multidisciplinary clinical situations. Situational Judgement Tests would allow such determinations to be made and in due course these will be introduced, initially in a formative manner.)

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 rheumatology will be led in an institution (or in a group or network of allied institutions) by a Programme Director. A trainee will meet with their Programme Director on a regular basis, which typically would be every six months, to discuss their work. 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.

Clinical experience will 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 log-book or equivalent. The log-book 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

Association internationale sans but lucratif — International non-profit organisation

of patients. The log-book will be reviewed in a summative manner, separately, by the local Programme Director together with relevant trainers with whom the trainee has worked.

Professional behaviours 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 Programme Director 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 was 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 recognised as a European Rheumatologist all aspects of the above assessment approaches will need to be completed satisfactorily.

d. Governance

The governance of an individual's training programme will be the responsibility of the Programme Director and the institution(s) in which the training programme is being delivered. A trainer will be responsible to the Programme Director for delivering the required training in their area of practice.

II. TRAINING REQUIREMENTS FOR TRAINERS

1. Process for recognition as trainer

a. Required qualification and experience

A trainer would be a registered medical practitioner and registered too as a rheumatology specialist/consultant within his or her own country. They will have satisfied any relevant national requirements as regards accreditation/appraisal/training to be a trainer. A Programme Director would be someone who has been/is a trainer and who has considerable knowledge and experience of training doctors.

Trainers and Programme Directors must be in active clinical practice and engaged in training in the training centre or network. Their appointments would be for five 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. It would be unlikely for a Programme Director to hold this position for more than two five-year appointments. This would enable a turnover and refreshment of appointees.

Association internationale sans but lucratif — International non-profit organisation

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).

b. Core competencies for trainers

A trainer will be:

- 1. Familiar with all aspects of the overall rheumatology curriculum as it relates to practice within their country
- 2. Experienced in teaching and in supporting learners
- 3. Skilled in identifying the learning needs of their trainees and in guiding the trainees to achieve their educational and clinical goals
- 4. Able to recognise trainees whose professional behaviours are unsatisfactory and initiate supportive measures as needed
- 5. Trained in the principles and practice of medical education

2. Quality management for trainers

It is hoped that trainers and Programme Directors 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 Programme Directors, sufficient time for their work with trainers.

It would be unusual for a trainer to have more than four 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 Programme Director 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 Programme Directors will be appraised typically on no less that an annual basis within their Department/Institution as local circumstances determines.

Educational support of trainers and Programme Directors will be provided by their Department and Institution and through the Section and Board of Rheumatology of UEMS.

III. TRAINING REQUIREMENTS FOR TRAINING INSTITUTIONS

1. Process for recognition as training centre

Association internationale sans but lucratif — International non-profit organisation

a. Requirement on staff and clinical activities

A 'Training Centre' is a place or number of places where trainees are able to develop their rheumatological competences. 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.

Thus, rheumatology 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. This should include a hospital or institution that provides academic activity and is also recognised for training in internal medicine and surgery. Each participating institution in a network must be individually recognised as a provider of a defined section of the curriculum.

The training of a trainee will be led and managed by a specialist/consultant rheumatologist. This specialist will be active in the practice of clinical rheumatology with personal responsibility for the management of patients with a wide range of rheumatological conditions. Within a training centre there would be a number of specialist/consultant rheumatologists (trainers) who would be able to supervise and personally train a trainee. Whilst the trainer will not manage patients with all the diagnoses listed above he/she will be able to ensure, by working with the Programme Director 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 in-patients.

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

The staff of a training centre will engage collaboratively in regular reviews of the centre's clinical activity and performance. There will be regular multi-disciplinary 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 other clinical groups such as rehabilitation medicine, orthopaedics, paediatrics, oral medicine in dental practice, immunology and dermatology.

Within a rheumatology 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 rheumatological 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.

Association internationale sans but lucratif — International non-profit organisation

The balance between in-patient and out-patient numbers is constantly changing as rheumatology becomes more out-patient based than in the past. Thus, no specific in- or out-patient numbers are stated as being necessary to be seen by a trainee during their training.

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 Programme Director 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 rheumatological 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 Programme Director should remain the same. Programme Directors may also be trainers.

It is not a requirement that a training centre is also an academic centre for rheumatology but it is desirable that a training centre would have strong academic links and contribute to research and an aspiration that 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 recognised/accredited by the relevant national authority as being suitable for training specialists/consultants in rheumatology. Confirmation of such status of training centres will be by National Representatives to the Section and Board.

When a rheumatology department/centre wishes to be recognised as a training centre they will submit a report to the UEMS Section and Board of Rheumatology 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.

info@uems.net

13

Association internationale sans but lucratif — International non-profit organisation

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.

b. Requirement on equipment, accommodation

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 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.

2. Quality Management within Training institutions

Accreditation

Training centres would be recognised within their own country as being suitable for being such and for being suitable for the care of patients with a wide range of rheumatological 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:

- 1. Providing care for patients with a wide range of rheumatological conditions
- 2. Providing educational and training support for trainees and others
- 3. 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).

Association internationale sans but lucratif — International non-profit organisation

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 Programme Director 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 Programme Director. 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 Programme Directors should include sufficient time for them to fulfil their educational and training responsibilities.

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

To assist a rheumatology specialist moving form one EU country to another it would be expected that they have satisfactorily completed a training programme in rheumatology 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).

Association internationale sans but lucratif — International non-profit organisation

Appendix 1

Record 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 Rheumatologist 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.

Association internationale sans but lucratif — International non-profit organisation

Appendix 2

List of conditions

The list of conditions which provides the basis of the European Rheumatology Curriculum . A distinction here is made between conditions which a trainee ideally should have seen (shown in black) and those which although not necessarily seen of which a trainee must have some knowledge (shown in blue). Trainees may well have seen patients with conditions not listed below and this would be reflected in their portfolio/record of training or equivalent documentation.

Rheumatoid Arthritis

Spondyloarthritis

Ankylosing spondylitis Inflammatory bowel disease-associated arthritis Non radiologic axial and peripheral spondyloarthritis Psoriatic arthritis

Reactive arthritis

(Reactive arthritis including:

Arthritis associated with subacute bacterial endocarditis

Acute rheumatic fever Intestinal bypass arthritis

Other colitic-associated arthropathies

Post-dysenteric arthritis
Post-immunization arthritis)

SAPHO syndrome

Undifferentiated spondyloarthritis

Arthritis associated with acne and other skin diseases

Systemic lupus erythematosus and antiphosholipid syndrome

Systemic lupus erythematosus

Discoid lupus

Drug-related lupus

Primary antiphospholipid syndrome Secondary antiphospholipid syndrome

Systemic sclerosis

Diffuse systemic sclerosis Limited systemic sclerosis Localized scleroderma Chemical and drug-related Scleroderma-like syndromes

Other systemic connective tissue diseases

Adult-onset Still's disease Dermatomyositis Polymyositis

Association internationale sans but lucratif — International non-profit organisation

Erythema nodosum

Overlap syndromes including

- Mixed and undifferentiated connective tissue disease

Sjögren's syndrome

Eosinophilic fasciitis

Eosinophilia-myalgia syndrome

Relapsing panniculitis

Relapsing polychondritis

Vasculitis and related diseases

Behçet's disease

Eosinophilic granulomatosis with polyangitis - (Churg-Strauss)

Granulomatosis with polyangiitis (GPA) – (Wegener's granulomatosis)

Hypersensitivity and small vessel vasculitis

Microscopic polyangitis (MPA)

Polyarteritis nodosa

Polymyalgia rheumatica

Temporal arteritis

Takayasu arteritis

Cogan's syndrome

Cryoglobulinemic vasculitis

Hypocomplementemic urticarial vasculitis

IgA vasculitis (Henoch Schönlein)

IgG4 related disease

Isolated aortitis

Primary central nervous system vasculitis

Single organ vasculitis

Sweet's syndrome

Systemic necrotizing vasculitis overlaps

Thrombagiitis obliterans (Buerger's disease)

Vasculitis mimics

Infectious arthritis

Infectious/septic arthritis

Bacterial (non-gonococcal and gonococcal)

Mycobacterial

Spirochetal (for example syphilis, Lyme)

Viral (for example HIV, Hepatitis B, Parvovirus)

Fungal

Parasitic

Whipple's disease

Disorders of the locomotor system associated with primarily metabolic, endocrine or haematological diseases

Crystal-associated diseases:

Basic calcium phosphate (hydroxyapatite)

Calcium pyrophosphate dihydrate deposition disease

Monosodium urate monohydrate (gout)

Calcium oxalate

Association internationale sans but lucratif — International non-profit organisation

Endocrine-associated diseases. Rheumatic syndromes associated with:

Acromegaly

Diabetes mellitus

Hyperparathyroidism

Hyperthyroidism

Hypothyroidism

Cushing's disease

Hypoparathyroidism

Haematological-associated diseases. Rheumatic syndromes associated with:

Hodgkin's and Non-Hodgkin's lymphoma

Multiple myeloma

Angio-immunoblastic lymphadenopathy

Drug-induced myelodysplastic and myeloproliferative syndromes

Haemoglobinopathies

Haemophilia

Primary myelodysplastic and myeloproliferative syndromes

Bone and cartilage disorders

Primary osteoarthritis

Secondary osteoarthritis

Chondromalacia patellae

Metabolic bone diseases:

Diffuse idiopathic skeletal hyperostosis

Hypertrophic osteoarthropathy

Idiopathic and secondary avascular necrosis of bone

Insufficiency fractures

Osteochondritis dissecans

Osteomalacia

Osteoporosis

Post menopausal

Secondary OP (except drug-related OP)

Drug related OP including steroid-induced OP

Paget's disease of bone

Transient osteoporosis

Bone disease related to renal disease

Hereditary, congenital, and inborn errors of metabolism associated with rheumatic syndromes

Disorders of connective tissue:

Hypermobility syndrome

Ehlers-Danlos syndromes

Osteogenesis imperfecta

Marfan's syndrome

Mucopolysaccharidoses

Pseudo-xanthoma elasticum

Osteochondrodysplasias:

Multiple epiphyseal dysplasia Spondylepiphyseal dysplasia

Association internationale sans but lucratif – International non-profit organisation

Inborn errors of metabolism affecting connective tissue:

Homocystinuria Ochronosis

Storage disorders:

Fabry's disease Farber's lipogranulomatosis Gaucher's disease

Immunodeficiency:

Acquired neutropenia Common variable immunodeficiency (CVID) IgA deficiency Hereditary neutropenia

Other forms of hypogammaglobulinemia:

Bruton's agammaglobulinemia Hyper- IgM syndrome

Primary T cell defects:

ADA deficiency PNP deficiency SCID deficiency

Secondary T cell deficiencies:

HIV Drug induced Low CD4 syndrome

Autoinflammatory syndromes including:

Familial Mediterranean fever
Muckle-Wells Syndrome
Tumor necrosis factor receptor-associated periodic syndromes (TRAPS)

Others conditions in this overall category:

Haemochromatosis Hyperlipidemic arthropathy Myositis ossificans progressiva Wilson's disease

Non-articular and regional musculoskeletal disorders :

Fibromyalgia Myofascial pain syndromes

Axial syndromes:

Cervical pain syndromes
Coccydynia
Intervertebral disc disease
Low back pain
Osteitis condensans ilii
Radiculopathies
Spinal stenosis
Spondylolisthesis

Spondylolysis

Aseptic and infectious discitis

Association internationale sans but lucratif – International non-profit organisation

Osteitis pubis

Regional musculoskeletal disorders affecting all joints:

Bursitis

Enthesitis

Tendonitis

Tenosynovitis

Tendon ruptures (including shoulder cuff and medial gluteus for instance, or even

Achilles tendon rupture

Disorders affecting specific joints:

Adhesive capsulitis

Dupuytren's contractures

Impingement syndrome

Shoulder-rotator cuff tear

Trigger fingers

Wrist ganglions

Knee synovial plicaes

Internal derangements:

Costochondritis

Cysts

Hallux rigidus

Heel pain

Metatarsalgia

TMJ syndromes

Biomechanical/anatomic abnormalities associated with regional pain syndromes:

Foot deformities

Kyphosis

Leg length discrepancy

Scoliosis

Overuse rheumatic syndromes:

Occupational

Performing artists

Recreational

Sports

Sports medicine:

Injuries

Sprains

Strains

Female athlete

Medication issues

Nutrition

Entrapment neuropathies:

Lower extremity entrapments

Thoracic outlet syndrome

Upper extremity entrapments

Other conditions:

Reflex sympathetic dystrophy (Complex regional pain syndrome)

Erythromelalgia

Association internationale sans but lucratif — International non-profit organisation

Neoplasms and tumor-like lesions

Benign

Joints:

Ganglions

Loose bodies

Pigmented villonodular synovitis

Fatty lesions

Synovial osteochondromatosis

Vascular lesions

Tendon sheaths:

Fibroma

Giant cell tumor

Nodular tenosynovitis

Bone:

Osteoid osteoma

Malignant:

Primary:

Synovial sarcoma

Secondary:

Leukaemia

Metastatic malignant tumours

Myeloma

Malignancy-associated rheumatic syndromes:

Palmo-plantar fasciitis

Carcinomatous polyarthritis

Muscle diseases

Inflammatory

Dermatomyositis

Inclusion body myositis

Polymyositis

Metabolic

Primary

Glycogen storage diseases

Lipid metabolic disorders

Mitochondrial myopathies

Myoadenylate deaminase deficiency

Secondary

Drug-induced

Electrolyte disorders

Endocrine disorders (except see above)

Nutritional

Toxic

Muscular dystrophies

Myasthenia gravis

Miscellaneous rheumatic disorders

Charcot joint

Multicentric reticulohistiocytosis

Raynaud's disease

Secondary amyloidosis

Association internationale sans but lucratif – International non-profit organisation

Plant thorn synovitis Primary amyloidosis

Remitting seronegative symmetrical synovitis with pitting edema

Intermittent arthritis:

Palindromic rheumatism Intermittent hydrarthrosis

Arthritic and rheumatic syndromes associated with:

Primary biliary cirrhosis

Sarcoidosis

Chronic active hepatitis

Drugs

Environmental agents

Pancreatic disease

Scurvy

Vaccinations

Rheumatic disease in the geriatric population

Rheumatic disease in the pregnant patient

Rheumatic syndromes in renal insufficiency and dialysis patients

Uveitis and scleritis

Paediatric musculoskeletal conditions: (In most EU member states, paediatric rheumatology is a separate specialty with specialists/consultants trained in both paediatrics and rheumatology in children.)

Henoch-Schönlein Purpura

Kawasaki Disease

Juvenile spondyloarthritis

Pauciarticular juvenile idiopathic arthritis (JIA)

Polyarticular juvenile idiopathic arthritis (JIA)

Systemic juvenile idiopathic arthritis (JIA) (Still's Disease)

Systemic lupus erythematosus

Acute rheumatic fever

Juvenile dermatomyositis

Neonatal lupus syndrome

Scleroderma syndromes

Recognize non-rheumatic disorders in children that can mimic musculoskeletal conditions: Infectious or post-infectious syndromes

Post-infectious arthritis and arthralgia

Post-viral myositis

Septic arthritis and osteomyelitis

Transient synovitis of the hip

Orthopaedic conditions

Legg-Calvé-Perthe's Disease

Other avascular necrosis syndromes

Patello-femoral syndrome

Slipped capital femoral epiphysis

Spondylolysis and spondylolisthesis

Non-rheumatic pain

Association internationale sans but lucratif — International non-profit organisation

Benign limb pains of childhood ("growing pains")

Benign hypermobility syndrome

Pain amplification syndromes including reflex sympathetic dystrophy

Neoplasms

Ewing's sarcoma

Leukaemia

Lymphoma

Primary bone tumours

Osteosarcoma

Tumours metastatic to bone (especially neuroblastoma)

Bone and cartilage dysplasias

Inherited disorders of metabolism

Know the major sequelae and complications of paediatric musculoskeletal conditions and their implications in adult life:

All types of JIA

Henoch-Schönlein Purpura

Kawasaki Disease

Calcinosis

Cardiac tamponade

Chronic uveitis

GI- intussusception, intestinal infarction

GI vasculitis

Juvenile dermatomyositis

Macrophage activation syndrome

Neonatal lupus syndrome

Renal - chronic nephritis