1. GENERAL REMARKS

1.1 Description of the discipline

Rheumatology is a specialty of medicine concerned with the diagnosis and management of diseases and of painful and functional disorders of the musculo-skeletal apparatus, that is, of the locomotor and connective tissue systems as well as of the adjoining soft tissues. It includes inflammatory diseases of the musculo-skeletal system, of the connective tissue and of the vessels; degenerative diseases of the joints and spine; metabolic disorders which manifest in the locomotor apparatus; soft tissue disorders and diseases of the internal organs and of the nervous system, insofar as these relate to the above-mentioned diseases (as listed in: “Classification of Diseases of the Locomotor Apparatus”, Compendia Rheumatologica Volume 4, EULAR Publishers, Basel, 1979).

Therefore, Rheumatology includes interdisciplinary knowledge in particular of internal medicine, orthopaedics, neurology and neurosurgery, physical medicine and rehabilitation etc.

The Rheumatologist should be familiar with the aetiology, pathogenesis and epidemiology of the disorders pertaining to this specialist field. Their activities should focus on the one hand on diagnostic procedures, utilising or having access to clinical, laboratory, imaging and various special techniques (ECG, sonography, arthroscopy, endoscopy, electromyography, etc.) and on therapy and management, which in addition to pharmacological methods also include local injection techniques, physical therapy, orthopaedic measures, occupational therapy, ergonomics and psychosocial care.

The Rheumatologist should also be familiar with the prognosis, prophylaxis and socio-economic importance of the rheumatic diseases and also have experience in the indications for surgery of the locomotor apparatus.

1.2 Goals of Continuing Medical Education and Professional Development

Post-graduate training leading to recognition as a specialist in Rheumatology should furnish the candidate with knowledge and skills which enable him to be competent in the entire field of Rheumatology.

The purpose of continuing medical education and professional development is to guarantee the maintenance and up-grading of knowledge, skills and competence following completion of post-graduate training. This process of lifelong learning is to enable the individual to expand and fulfil their personal
and professional potential and thereby meet the present and future needs of patients and deliver health outcomes and health care priorities of the population and health care providers.

Continuing medical education and professional development is the ethical and moral obligation of each rheumatologist throughout his or her professional career.

It is essential that all rheumatologists who have completed their training and who are accredited should continue their medical education throughout their careers. The aim is to maintain and develop their competencies in the management of those people with rheumatological conditions as outlined in the definition of the speciality. These competencies have been previously stated in the UEMS Core Curriculum for Specialist Training to become recognised as a rheumatologist. In addition to these core competencies, a specialist may diversify and develop additional expertise and competencies which they will also need to maintain.

All rheumatologists should undertake continuing medical education and professional development on a continual basis through reading relevant literature, seeking new knowledge to manage specific problems, interacting with colleagues and participating in local and external educational activities.

There should be a 5 year cycle of continuing medical educational activities during which time the specialist should ensure they maintain their competency in those areas outlined within the Core Curriculum through a programme of educational activities as recommended in the EBR Charter for CME.

A rheumatologist should be able to demonstrate that they have maintained their competency to deliver the highest standards of care commensurate with the developments in knowledge and clinical practice of musculoskeletal conditions. This can be demonstrated by participation in educational activities and forms of assessment as recommended in the UEMS Charter for Continuing Medical Education and the position paper by the UEMS Section of Rheumatology / European Board of Rheumatology.
2. SYLLABUS

2.1 GENERAL KNOWLEDGE, SKILLS AND ATTITUDES

1 Basic Knowledge
A basic knowledge must be maintained of anatomy, biochemistry, physiology, biomechanics, pathophysiology of pain, and cellular and molecular biology and genetics relevant to the rheumatic diseases.

2 Knowledge of the Rheumatic Diseases
A thorough theoretical knowledge must be maintained of the rheumatic diseases (APPENDIX A). This will include knowledge of the epidemiology, aetiology, pathogenesis, pathology, clinical features, natural history and management of these diseases.

3 Clinical skills
The specialist must maintain their clinical skills by regular contact with people with musculoskeletal conditions, and have responsibility for their diagnosis and management, and appropriate courses.

There should be ongoing experience of the spectrum of musculoskeletal conditions.

4 Selection and interpretation of appropriate laboratory tests
Knowledge must be maintained of the haematological, immunological, biochemical and histopathological changes that accompany bone and rheumatic diseases; and the appropriate use and interpretation of these investigations in the diagnosis, assessment and monitoring of these diseases.

5 Knowledge of the place of imaging techniques in the investigation of the rheumatic diseases
Knowledge must be maintained of the indications for and interpretation of imaging techniques such as conventional Xrays, CT scans, MRI scans, ultrasonography and radio-isotope techniques in the diagnosis, assessment and monitoring of the rheumatic diseases.

6 Knowledge of the place of bone measurement techniques
Knowledge must be maintained of the indications for and interpretation of bone measurement techniques such as bone densitometry and ultrasonography.

7 Understand the indications, actions and monitoring of drugs used in the rheumatic diseases
Knowledge must be maintained of non-steroidal anti-inflammatory drugs, disease modifying drugs, cytotoxic immunosuppressive drugs, biologic agents, steroids, analgesics, psychotropic, gastroprotective drugs and drugs used in the treatment of osteoporosis.

8 Understand the role of the professions allied to medicine in the management of rheumatic disorders
An understanding must be maintained through close co-operation of the methods used by occupational, physiotherapists and clinical nurse specialists in the management of patients with the rheumatic diseases. It will also include maintaining knowledge of the community, social and psychological consequences of these diseases and the management of immobility (driving, wheelchairs, orthotics and special seating).

9 Understand the role of relevant allied medical specialities
Maintain an understanding through close co-operation of the role of relevant allied medical specialities such as orthopaedics, anaesthetics, radiology, rehabilitation medicine and internal medicine sub-specialities and of what can be achieved by their expertise.

10 Appreciate the role of patients in the management of their own conditions
Knowledge of patient education must be maintained. Knowledge should also be maintained of the ways of working with patients and their representatives to empower people with musculoskeletal conditions to actively participate in their own care.

11 **Understand the socioeconomic and legal aspects of rheumatic disorders**
Understanding of rights of people with musculoskeletal conditions should be maintained, and knowledge of the ethical and legal aspects of these conditions should be kept up to date.

12 **Understand research developments relevant to rheumatology**
Understanding of research developments relevant to rheumatology must be maintained by literature review, attending educational activities and in certain cases by ongoing participation in research activities so that the specialist is up to date with current advances.

13 **Communication skills**
Communication skills, such as patient education and training others, should be maintained.

14 **Health care delivery**
Knowledge must be maintained of appropriate methods of delivering health care for musculoskeletal conditions.

### 2.2 SKILLS OF SPECIALITY

There are certain basic skills that all rheumatologists should maintain competency in. These are:

1. **Aspirate and inject synovial joints and analyse synovial fluids**
The rheumatologist is required to maintain their competence at aspirating and injecting joints using the appropriate techniques.

   The rheumatologist is also be expected to maintain their competence to recognise the macroscopic appearance of non-inflammatory, inflammatory, haemorrhagic and septic synovial fluid and be able to detect crystals by polarising light microscopy.

2. **Perform a needle biopsy of synovium**
The rheumatologist is required to maintain their competence to perform a needle biopsy of synovium.

3. **Perform soft tissue injections**
The rheumatologist is required to maintain their competence to inject tennis/golfers elbow, carpal tunnel, tenosynovitis/flexor tendon nodules, bursitis, tendinitis and plantar fasciitis.

4. **Counselling skills**
The rheumatologist is required to maintain their competence to counsel patients, relatives and health professionals in the many varied situations in clinical rheumatology.

5. **Management skills in providing a Rheumatology service**
The rheumatologist is required to maintain their competence to manage the provision of appropriate health care to those with musculoskeletal conditions.
6 **Audit Methodology and Specific Outcome Measures**
The rheumatologist is required to maintain their competence to evaluate the delivery of care and outcomes relevant to rheumatic disorders. This could involve participation in local/regional clinical audit meetings and national speciality meetings.

2.3 **OPTIONAL SKILLS OF SPECIALITY**

There are some skills that it is recognised certain rheumatologists are competent to perform. They should therefore maintain their competency in these skills as part of their continuing medical education and professional development. These skills are:-

1. **Ability to perform biopsy such as of**
   1. skin
   2. bone
   3. subcutaneous fat
   4. muscle
   5. minor salivary gland
   6. other (state in CME Log Book)

2. **Ability to perform and interpret x-ray examinations studies**

3. **Ability to perform and interpret ultrasonographic examination for imaging the musculoskeletal system**

4. **Ability to perform and interpret peripheral MRI**

5. **Ability to perform and interpret bone densitometry**

6. **Ability to perform and interpret laboratory investigations**

7. **Ability to perform and interpret electromyographic studies**

8. **Ability to perform diagnostic and therapeutic arthroscopy**

9. **Ability to perform radio-isotope, chemical and other techniques of closed non-surgical synovectomy**

10. **Ability to perform epidural and regional nerve blocks**

11. **Ability to perform manipulation and mobilisation techniques**

12. **Ability to perform and interpret capillaroscopy**

13. **Ability to perform intervertebral disc aspiration, injection or nucleolysis**