

A Career in Rheumatology

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The World Journal of Medical Education and Research (WJMER) is the online publication of the Doctors Academy Group of Educational Establishments. Published on a quarterly basis, its aim is to promote academia and research amongst all members of the multi-disciplinary healthcare team including doctors, dentists, scientists, and students of these specialties from all parts of the world. The principal objective of this journal is to encourage the aforementioned from developing countries in particular to publish their work. The journal intends to promote the healthy transfer of knowledge, opinions and expertise between those who have the benefit of cutting edge technology and those who need to innovate within their resource constraints. It is our hope that this will help to develop medical knowledge and to provide optimal clinical care in different settings all over the world. We envisage an incessant stream of information will flow along the channels that WJMER will create and that a surfeit of ideas will be gleaned from this process. We look forward to sharing these experiences with our readers in our subsequent editions. We are honoured to welcome you to WJMER.



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A Career in Rheumatology

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Introducing Rheumatology

Rheumatology is a medical specialty that is concerned with diseases of the musculoskeletal system the remit of which includes dealing with pathology that affects joints and associated structures as well as muscles and soft tissues. Rheumatic conditions are extensive and challenging to treat not only because of the range of pathological processes involved and the many different ways a disease can manifest, but also because of their significant effects on the patients' quality of life which can render them unemployed and this, in turn, has far reaching consequences (i.e. if they are the sole bread winner for example). Rheumatological conditions can be debilitating illnesses and are a considerable cause of morbidity.

Many of the conditions that a rheumatologist deals with involve autoimmune processes, such as Rheumatoid Arthritis (RA). However, since a lot of rheumatological diseases affect multiple organs, an understanding of the other systems of the body is essential. For example, Systemic Lupus Erythematosus (SLE) has profound effects on the kidneys, skin, heart as well as joints, so it is easy to appreciate how one disease may present in many diverse ways.

Inflammatory conditions are common in rheumatology so understanding and managing conditions that fall under this remit, such as inflammatory arthritis and vasculitis to name but a few, will be frequent occurrences. Also overseeing the care of patients who suffer from metabolic bone diseases such as osteoporosis and soft tissue conditions such as fibromyalgia will also be a rheumatologist's responsibility.

Many genetic conditions such as Marfan's syndrome and haemochromatosis are also encountered by a rheumatologist due to the underlying pathogenesis of these conditions involving the basic components that

make up much of the musculoskeletal system. For example, Marfan's syndrome is a disorder of collagen and thus it manifests in various ways such as hypermobile joints which means it warrants rheumatology input.

From the above it is clear how broad the range of diseases encountered by a rheumatologist is and for that reason it could be said that this is one of the enduring fields in medicine where one has the opportunity to practice as a generalist which entails having a holistic approach to looking after the patients.

Life as a Rheumatologist

A majority of the practising rheumatologist's time will be spent working with patients in the outpatient department. Clinics are very busy with both new and follow up patients to see. A rheumatologist will encounter a whole array of conditions that range from Osteoarthritis to SLE. Typically, rheumatologists do 5 - 6 clinics per week with 5-7 new patients or 10-14 follow up patients in each session.

They will also have in-patients on the wards even though most hospitals don't have a ward that is exclusively dedicated to rheumatology. Patients admitted to hospital with new or existing rheumatological conditions that need rheumatological review can be referred to the rheumatology department and they can be seen urgently. Moreover, many cases of Pyrexia of Unknown Origin (PUO) require a rheumatologist's opinion because they are an expert in a whole array of different diseases – much like the cases seen in episodes of the hit TV series "House" and indeed those medics who find the investigative process that is embodied in the protagonist of this series (the so-called 'diagnostician') fascinating need look no further than the field of rheumatology. Some rheumatologists who have undertaken additional medical training usually contribute to the medical on call rota. Thus they are able to provide additional

rheumatological input when required during acute medical admission. Alternatively, patients can be referred to be seen in the out-patient clinics.

Overall, a rheumatologist's day consists of clinics, administrative work, seeing ward referrals, ward round, clinical meetings (X-ray meetings or MDT meetings with colleagues in renal, immunology, or respiratory) and teaching both trainees and medical students.

The vast majority of consultants (in common with consultants in all other specialties) will work considerably longer hours than 9am to 5pm, Monday to Friday.

Rheumatologists work very closely with other specialties and to name just a few they include:

- ❑ **Specialist nurses** when collaborating long term care
- ❑ **Radiologists** because expert help is needed when interpreting the pathological effect conditions have had on the radiographs of bones and various organs
- ❑ **Orthopaedic surgeons** when considering joint replacements, for osteoarthritis for example, when medical therapy has failed
- ❑ **Respiratory, dermatology, immunology and renal physicians** when collaborating care of these systems when they have been affected by a rheumatological condition
- ❑ **Physiotherapists** if a condition has affected patients in such a way that requires them to obtain help in order to regain mobility or reduce symptoms *i.e.*, Ankylosing Spondylitis (AS).

Although working on an outpatient basis means there is a lot of paperwork to deal with, it is no worse than any other speciality. Most of the administrative work is based around referrals to other specialties, contacting patients and their GPs because the chronic nature of many rheumatological conditions requires long term follow up care both in the community and in secondary health care settings.

Given that most rheumatological conditions are chronic, one of the most enjoyable aspects of working as a rheumatologist is the relationship that is built up with patients. The ability to help someone regain their mobility or improve control of their pain can be such a rewarding experience and seeing the dramatic changes in a patient's quality of life is something all rheumatologists relish. Moreover, being in such close contact with many other professionals, keeping up to date with all fields of medicine and connecting (no pun intended!) rheumatology to almost all specialties is another fantastic aspect of this job. Another exciting aspect of rheumatology is the thrill you get from diagnosing rare and confusing diseases and from the

problem solving skills that are employed to formulate a diagnosis. For example, the eponymous condition Susac's syndrome is very rare, but when it does present, it is usually with bizarre symptoms such as hearing loss and retinal artery occlusion and a rheumatologist's job is to recognise the pattern.

The opportunity for flexible working in rheumatology is excellent with the possibility of part time work even at a consultant level.

The many new and exciting developments in rheumatology treatments means there is ample opportunity to get involved in research and there is a huge potential to have an international reputation. Should you wish to pursue an academic route, you may be able to work out the underlying pathological processes of diseases, attend international conferences and present research findings and potential novel therapeutics.

Most rheumatologists have a specialist interest that vary from unexplained presentations of rashes to the rheumatic presentation of hepatitis C, but it isn't the norm to exclusively practice these. However, some other specialties such as rehabilitation or sports medicine may be regarded as subspecialties of rheumatology as they also work very closely with musculoskeletal disorders.

One of the advantages of working in rheumatology is that on call shifts are infrequent, but some rheumatologists can spend time on call as part of the general medicine rota if they have additional general medical training. The work life balance for a full time rheumatologist is better than some other specialties which can make it an ideal career for those interested in having a family or who have other commitments outside of medicine.

Earning potential during a career in rheumatology as a consultant is between £74000 and £100000. Although there are some opportunities to work privately, it is not something that is in a lot of demand which is one reason why most rheumatologists don't earn more than the average expected for a NHS consultant.

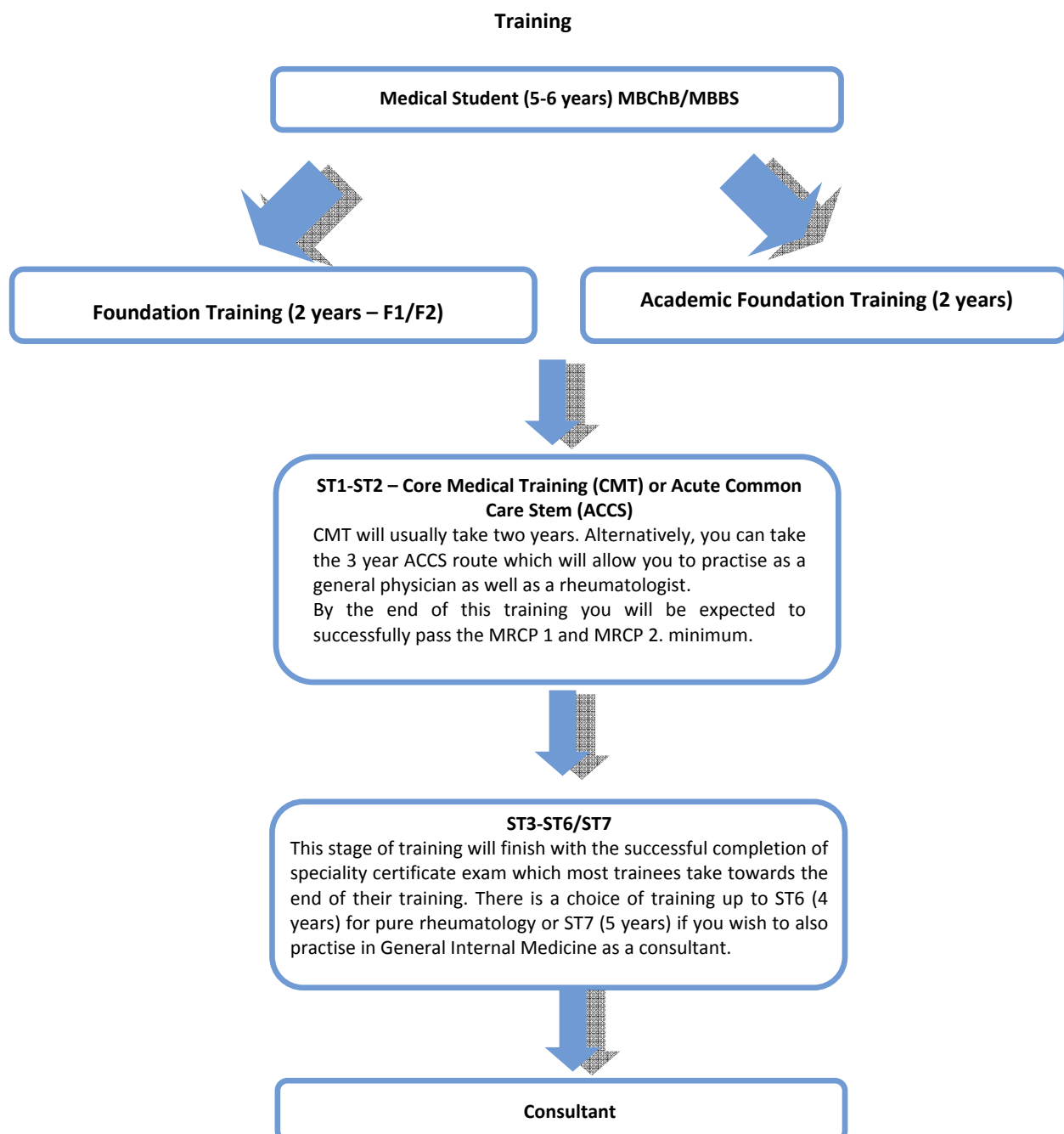
Facts and Figures

There is considerable demand for rheumatology expertise. Currently there are over 470 consultants and 210 trainees working in the specialty and it is one of the rare specialties where there is a relative balance between the number of people training and the number of consultant posts available⁵.

Recent and Future Developments

An area in rheumatology that has received a lot of attention in the recent years, due to the potential for controlling many symptoms experienced by patients, is the use of biological agents to treat inflammatory conditions such as RA. One of the major advances that have been made in this field is the use of disease modifying anti-rheumatic drug (DMARD) anti-TNF which have been shown to decrease the inflammatory process that drives many rheumatological conditions. For example, the drugs Infliximab and Enbrel are used at the moment for patients who are not responding to disease modifying agents, such as Methotrexate and

Sulfasalazine, and so far, these biologics have been very promising. New drugs that are being researched focus on using antibodies to antagonise the key mediators in inflammation and examples include interleukin inhibitors and tyrosine kinase inhibitors. These block the effect and production of many inflammatory mediators and thus combat the underlying pathological problem in conditions such as psoriasis, psoriatic arthritis and AS. The key challenge will be to identify how to integrate these advanced therapies into the clinical setting and tailor the treatment to the specific needs of each patient.



Bibliography:

1. Rheumatology – Approved Curriculum and Associated Assessment System 2010. General Medical Council. Available [online]: <http://www.gmc-uk.org/education/rheumatology.asp>
2. Speciality Training Curriculum for Rheumatology. Joint Royal Colleges of Physicians Training Board. Aug 2010. Available [online]: http://www.gmc-uk.org/Rheumatology_Curriculum_040510_V0.16.pdf_32486223.pdf_43572851.pdf
3. London Deanery – Rheumatology ST3. Available [online]: <http://www.londondeanery.ac.uk/var/recruitment/specialty-recruitment/2012-recruitment-adverts-jun-2012-dec-2012/rheumatology-st3>
4. Rheumatology. Joint Royal Colleges of Physicians Training Board. Available [online]: www.jrcptb.org.uk/trainingandcert/st3-spr/pages/rheumatology.aspx

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