

HISTORICAL ARTICLE

Rheumatology in Scotland – The Next Generation

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Rheumatology in Scotland has reached an important milestone. As a small and relatively young sub-speciality, the retirement of a few key individuals, coupled to dramatic changes in therapy, signal a step change for the discipline. Rheumatologists from the second generation who have recently retired have left behind a robust clinical and academic structure for the discipline which has consolidated the foundations laid by a handful of pioneers.

Prior to the Second World War, before the NHS and with a limited repertoire of drugs, there was little structure to rheumatology provision. A mixture of diagnostic services and physical therapies were centred in the practice of general medicine and associated with orthopaedic outpatient clinics at Scotland's four teaching hospitals. Rheumatology also (and unusually) had roots in the service of physical medicine which had evolved in association with departments of physiotherapy to provide diagnostic and therapeutic expertise in support of physical rehabilitation. Repositories of community provision for the treatment of arthritides, which had held sway in Victorian Scotland in spas such as Strathpeffer, Bridge of Allan, Ballater and Moffat were in decline in the 1920's for economic and clinical reasons. Around this time a small number of interested clinicians established charities to support rheumatology research and education in the United Kingdom. The National Campaign against Rheumatism (1928) and the Empire Rheumatism Council (1936) were predecessors of the Arthritis and Rheumatism Council (ARC) which subsequently became the Arthritis Research Campaign and similar bodies were also established in Europe and in America.

With the establishment of the National Health Service in the post-war period, rheumatology like many medical specialities, emerged from academic general medicine as a clinical service partnered to scientific research. A number of Scottish teaching hospital clinicians initiated some sub-specialisation and research around the same time. Dr TN Fraser, an assistant at the Western Infirmary, Glasgow (Figure 1) developed an interest in rheumatology and with colleagues, Browning, Currie and Stevenson, a series of clinics was established at the Western Infirmary, Glasgow Royal Infirmary and the Southern General which were funded by the local authority or by charity prior to the NHS. Fraser also ran a rheumatism unit in Killearn and consulted at The Glasgow Orthopaedic and Rheumatism Clinic (Bath Street) which had been established in the 1920's with support from the Red Cross and other benefactors. The Clinic provided charitably funded physiotherapy and medical input from a city centre location and offered innovative evening clinics.



Figure 1: Dr Tom Fraser, pioneer of Scottish Rheumatology

Currie was the first physician in the UK to describe treatment with phenylbutazone¹ and Fraser published the earliest clinical trial of gold therapy in rheumatoid arthritis.²

Stanley Davidson, a 29 year old appointee to the Regius Chair of Medicine in Aberdeen in 1930 developed interests in rheumatology and haematology. He had graduated in Edinburgh following severe injuries during service with the Gordon Highlanders in the First World War. Davidson, a future President of the RCPE and Editor of one of the world's leading textbooks of medicine, was subsequently knighted and was one of the first professors of medicine to recognise the benefits of sub-specialisation.



Figure 2: Professor Ian (JJR) Duthie, first Professor of Rheumatology, Edinburgh

He was a member of the Empire Rheumatism Council and a contributor to the first major British textbook of rheumatology edited by Copeman. In 1935 he recruited a local graduate, JJR Duthie (Figure 2), to be his house physician and subsequently arranged for him to be trained in rheumatology in England and the US.³ In 1938 Davidson moved to the Chair of Medicine in the Royal Infirmary of Edinburgh. His Aberdeen successor, Aitken, established a rheumatology service in the North East with beds at Stracathro Hospital, Brechin, and an outpatient service linked to orthopaedics at Aberdeen Royal

Infirmary. There was also an early community provision of rheumatology linked with the local authority's Department of Public Health who provided physical therapy at the newly built Bon-Accord Baths. Local graduate, Logie Bain and his colleague Hubert Balch subsequently established a dedicated rheumatology service, which moved to unused infectious diseases beds at the City Hospital in 1960 with an outpatient service at Woolmanhill, the former site of Aberdeen Royal Infirmary.

Following his move to Edinburgh Professor Davidson did not lose interest in rheumatology. The end of the war and the advent of the NHS afforded the opportunity to develop three specialist units in the Northern General Hospital (NGH) - previously the Pilton Hospital for Infectious Diseases for the Port of Leith, before Leith and Edinburgh amalgamated in 1922. The first of these specialist units at the NGH was the Rheumatic Diseases Unit which was led by Ian Duthie (v.s). At first its facilities were limited to two pavilion type wards, but in 1955, with funding from the Oliver Bird Fund of the Nuffield Foundation, a building with purpose-built out patient clinics, a library and facilities for clinical and laboratory research was added. Initially Duthie was assisted by Drs RJ (Jack) Sinclair and WRM (Rowland) Alexander and later by Drs Tom Chalmers and John McCormick as consultant colleagues. The clinical service, like that in Aberdeen, evolved as a stand alone service with continuing academic affiliation to

the Department of Medicine and Duthie was subsequently given a personal Chair in Rheumatology. Clinical collaboration with orthopaedic surgeons and the development of combined rheumatology/orthopaedic clinics for patients with rheumatoid arthritis were an early and important part of the work of the Edinburgh Rheumatic Diseases Unit.

The Princess Margaret Rose Hospital, Edinburgh, which was built in 1932, was the first purpose built orthopaedic hospital in Scotland. Mr Douglas Savill and Willy Souter were pioneers in reconstructive hand surgery and the development of elbow prostheses. Concern about occupational risk factors for the development of osteoarthritis also resulted in the setting up of an industrial rheumatology unit led by Dr JAD (Jock) Anderson.

Dundee also had an early rheumatology service provided alongside general medicine and associated with orthopaedic clinics. Dr AA Kirkland led the provision, initially located at Bridge of Earn, near Perth. Matthew Wilkinson who trained at the Hammersmith with Bywaters, was appointed in 1962 and expanded the clinical service with Dr J Frew, moving to Maryfield Hospital in Dundee and then to Ninewells, which opened in 1974.

Services outwith the teaching hospitals were not developed systematically but sometimes functioned alongside orthopaedic or physical medicine departments which had been developed following the heavy toll of disabling limb injuries seen in the First World War. The Nicolson MacKenzie Hospital in the Highlands was absorbed into the NHS at its foundation in 1948 having previously run as charitable accommodation in the Victorian spa village of Strathpeffer to allow poor patients to access therapeutic wells there. Dr Bill Lancaster a general physician developed a rheumatology service as part of general medicine and Dr Philip Rigby and his successor Dr Lorna Fisher continued the physical medicine outpatient practice attached to physiotherapy with clinics in Caithness and the Western Isles. Dr Walter Penman, a geriatrician, provided a service in Dumfries and a number of physicians provided local services elsewhere in Scotland.

A further step in Glasgow rheumatology followed the appointment of local graduate, Watson Buchanan (Figure 3) as a Consultant Rheumatologist and Senior Lecturer in the University Department of Medicine on his return from the National Institutes of Health in Washington, in 1964. With junior colleagues Tony Boyle and Wilson Downie he created a comprehensive service, at the Centre for Rheumatic Diseases, a short distance from the Department of Medicine at Glasgow Royal Infirmary. The small hospital in Baird Street (Figure 4), which was entirely devoted to patients with rheumatic diseases was to become even better known than its illustrious neighbour, the Black Street Clinic (which provided services in genito-urinary medicine and led to occasional confusion if patients presented at the wrong entrance!). In the late 1960's and 1970's the CRD at Baird street became a national and international focus for clinical training and research. Together with Carson Dick and Keith Whaley, both former trainees, Buchanan developed a comprehensive clinical and diagnostic service for the West of Scotland including in-house orthopaedic surgery. The NHS services were backed by a programme of clinical and laboratory research and Buchanan's



**Figure 3: Watson Buchanan
Rheumatologist at Glasgow
Royal Infirmary**

Figure 4: Centre for Rheumatic Diseases Baird Street Glasgow



interest in autoimmunity and inflammation led to valuable collaboration with John Anderson, Robert Goudie, Keith Whaley, Heather Dick and other clinical scientists at Glasgow University. The CRD also became a centre for clinical research and the development of outcome methodology for randomised controlled clinical trials of the expanding repertoire of anti-inflammatory and anti-rheumatic drugs. This research was greatly facilitated by a large base of willing and enthusiastic patients, and a stream of visiting Research Fellows from home and abroad. Physicians at Baird Street continued to have a commitment to general medicine at the Royal Infirmary and a number of trainees were appointed as General Physicians "with an interest in Rheumatology" to hospitals in and beyond Glasgow and the West of Scotland. Watson was appointed to a titular Chair of Rheumatology in Glasgow in 1972 in recognition of his achievements in teaching and research

Professor Buchanan's move to a Chair at McMaster University, Ontario in 1979 and Dr Dick's appointment to a readership in Newcastle, and the retirement of Duthie in Edinburgh in 1977, did little to halt the growth of the speciality in Scotland. Dr Roger Sturrock, a former trainee with Buchanan, returned to Scotland and was appointed to a new McLeod/ARC funded Chair at the Centre for Rheumatic Diseases in Glasgow after training in London. His major research interests were in ankylosing spondylitis and the HLA B27 related arthropathies. He was joined by Dr Hilary Capell, one of several international graduates trained at CRD, who developed the CRD's expertise in controlled clinical trials of the expanding group of 'second-line' drugs. The Unit moved to Glasgow Royal Infirmary in 1984 and the hospital in Baird Street which had been the centre of training and research closed and was subsequently demolished. Dr Max Field who trained at the Kennedy Institute and had an interest in joint infection, was appointed as a Senior Lecturer and later studied and developed undergraduate medical education. In Edinburgh Professor George Nuki replaced Duthie in 1979 and was appointed to the first University funded ARC chair of Rheumatology. He had previously trained at King's College and Westminster hospitals in London, at the CRD in

Glasgow and at the University of California at San Diego before appointments as Senior Lecturer and later Reader in the Welsh National School of Medicine in Cardiff. His major research interests were in gout, osteoarthritis and osteoporosis. As in the West this appointment was followed by an energetic expansion of research, teaching and clinical service provision in the East of Scotland.

Although the Glasgow teaching hospitals remained the largest rheumatology providers in the West of Scotland the clinical service was gradually expanded, linked to general physician posts throughout the city (Dr Denis Pitkeathly, Southern General Hospital, Dr Paul McGill, Stobhill Hospital, Dr Pat Rooney and Dr John Hunter, Gartnavel General Hospital) and then throughout and beyond the West of Scotland. Physicians with an interest were appointed to district hospitals in Ayr (Dr Peter Reynolds 1979), in Inverness (Dr Malcolm Steven 1985), Lanarkshire (Dr Asad Zoma 1987), Inverclyde (Dr David Marshall 1993) and Dumfries (Dr Mike McMahan 1993). Pure rheumatology appointments were also made in Falkirk (Dr Maciej Brzeski 1992).

The appointment of new professors in Edinburgh and Glasgow and of new consultants elsewhere in Scotland in the late 1970's was also a catalyst for the development and organisation of the specialty at a national level. A newly formed Scottish Rheumatology Club held its first meeting at the Northern General hospital, Edinburgh, in 1979. The twice yearly meetings rotated around district and teaching hospital centres, and were often hosted by the most recently appointed new consultant. From the outset the meetings included presentations by trainees, students, scientists and invited speakers. In addition to providing a valuable forum for formal discussion, academic presentations and informal collegiality, they gradually evolved as the nucleus of a nationally co-ordinated professional organisation which promoted postgraduate training, and fostered integrated clinical studies, audit and service developments.

Professor Nuki was also active in the formation of the British Society for Rheumatology and became its first President in 1984. The Society signalled rheumatology's new found identity and status, emphasising the links to clinical science and a move away from the historical connection to physical medicine. It created a unified UK society of physicians and scientists dedicated to stimulating and promoting the development of knowledge about rheumatic diseases and to encouraging advancement of the emerging medical specialty of rheumatology. Following his appointment as a Consultant in Aberdeen, David Reid became an early Secretary of the British Society for Rheumatology and Professor Sturrock subsequently became the second Scottish based President in 1996.

In Aberdeen, Dr Bain had established a well structured regional service to the North-East of Scotland. He also made links to the patient welfare body, Arthritis Care, which supported a number of patient welfare initiatives including a holiday home in Nairn. Following the retirement of Dr Balch and Dr Bain, Dr Norris Rennie, a local graduate (who also trained at the Centre of Rheumatic Diseases), was appointed in Aberdeen in 1979 and was joined by Dr Cliff Eastmond, an Edinburgh graduate with training in Liverpool and Leeds. They continued the development of the clinical service, including outreach clinics in Orkney, Shetland and later Elgin. An expanding and increasingly specialised workload led to the appointment of David Reid (v.s.) to an ARC funded post in 1986 in a further expansion of the Arthritis and Rheumatism Council's commitment to rheumatology training. Dr Reid, who had trained

as Clinical Lecturer in the Rheumatic Diseases Unit in Edinburgh, brought with him an expertise in bone disease which was becoming an increasing interest of rheumatologists, and was also charged with expanding the academic and teaching side of the speciality. This proved hugely successful and he subsequently moved to a university post and in 1999 was promoted to a personal Chair of Rheumatology. The Department moved their inpatient beds from their old home at the City Hospital to the Foresterhill site in 1994 with further clinical appointments (Dr Alan MacDonald) and academic initiatives. Dr Stuart Ralston, who had trained in metabolic bone disease and rheumatology at the CRD in Glasgow, and who had been a Wellcome Senior Research Fellow and Honorary Consultant in the Rheumatic diseases Unit in Edinburgh, was appointed as Senior Lecturer in Medicine in Aberdeen in 1991.

The concurrent expansion of clinical and academic aspects of the discipline were mirrored elsewhere. Ken Morley, who had trained at the Royal Postgraduate Medical School in London (the Hammersmith) joined Wilkinson in Dundee (1982). He replaced J Frew as a general physician with an interest in rheumatology and the service expanded throughout Tayside with informal cover to North Fife. Jill Belch, another former trainee of the Centre for Rheumatic diseases led academic developments in Dundee with her expertise in connective tissue disease and the evolving discipline of vascular medicine. When Wilkinson retired in 1991 he was replaced by Tom Pullar, who had trained at the CRD and been a Senior Lecturer in Clinical Pharmacology in Leeds.

In Edinburgh, Professor Nuki was joined at the Northern General Hospital by a number of clinicians and scientists following the retirement of Drs McCormick and Chalmers. Dr Nigel Hurst had research interests in clinical outcome measurement, health economics and health services research and Raashid Luqmani developed paediatric rheumatology and vasculitis research. Gordon Duff, a Scot who was trained in London and the USA, was appointed ARC Lecturer and later Senior Lecturer/Consultant and developed an internationally recognised cytokine research laboratory before leaving to take up an appointment as Professor of Molecular Medicine in Sheffield. When the Northern General closed in 1990 clinical rheumatology services in South East Scotland moved to the Western General. The research laboratories followed in 1992 taking over the refurbished Paderewski building, which had served as the hospital for the Polish Medical School in exile in Edinburgh during World War II. Further clinical appointments followed and Euan Mc Rorie, Michael Lambert and Vheena Dhillon expanded the service including outreach clinics from the Western General base (St John's, Livingstone; Roodlands, Haddington; Princess Margaret Rose; The Royal Hospital for Sick Children and the Royal Infirmary of Edinburgh), and initially also served the Borders and Fife. Subsequent service development saw local trainees establish pure rheumatology services in both regions. Dr Andy Martynoga, who was to die unreasonably young, set up a novel model for community based rheumatology services across Fife from the Cameron hospital at Windygates. This heralded the current move to extending near-patient services for patients with chronic diseases with an expanded role for nurse specialists, physiotherapists, occupational therapists and other Allied Health Professionals. Edinburgh trainee, Ruth Richmond, established a service at the Borders General Hospital. Academic rheumatology also expanded in Edinburgh and forged important links with several University disciplines: Drs Peter Tothill and Jim Hannan in Medical Physics; Professor Robin Stockwell, Drs Malcolm Wright and Donald Salter in

Anatomy, Physiology and Pathology and Dr Forbes in Epidemiology and Public Health. Professor Dugald Gardner, who trained with Duthie in the 1950's and had been the first director of the Kennedy Institute in London and Professor of Pathology at Queen's University in Belfast and in Manchester, returned to Edinburgh to establish a research group in osteoarticular pathology. Professor Donald Salter now leads the Group at the Queen's Medical Research Institute. Following Professor Nuki's retirement in 2002 the expanding roles of genetics and molecular medicine in Edinburgh have been reflected in the appointment of Stuart Ralston (v.s.) as ARC Professor of Rheumatology and Head of the School of Molecular and Clinical Medicine in 2005. His major research interests are in the genetics of osteoporosis and the pathogenesis and management of Paget's disease of bone. Professor Ralston moved from the Chair of Medicine and Bone Metabolism and Directorship of the Institute of Medical Sciences in the University of Aberdeen exemplifying the valuable links that have developed between the Scottish centres fostered by common training programmes and a mobility of trainees which looks to be less likely in the future.

In Glasgow there had been further expansion and sub-specialisation on both clinical and research fronts. Local trainee Rajan Madhok expanded the clinical team, developing collaborative interests in haemophilic arthritis and connective tissue disease. Hilary Capell's achievements were recognised by the award of a personal Chair by the University of Glasgow and Professor Sturrock and colleagues Drs David Kane and Peter Balint pioneered the use of ultrasound for musculoskeletal diagnosis. The CRD has become a focus for clinical physiological studies on joints through collaboration with a neuro-inflammation research group headed by Professor Bill Fraser. Iain McInnes, a Glasgow medical graduate and CRD trainee, who had spent some time at National Institutes of Health in the USA, was appointed as Professor of Experimental Medicine and Rheumatology in the University of Glasgow in 2002. He leads a basic science research programme aimed at elucidating the mechanisms responsible for the perpetuation of synovitis in RA and psoriatic arthritis and a programme of translational cytokine research.

In Aberdeen further academic initiatives followed Professor Ralston's move to Edinburgh. Cosimo De Bari a stem cell biologist and rheumatologist was appointed to a Chair of Translational Medicine in 2007 and Gary MacFarlane was recruited from Manchester to a new Chair of Epidemiology giving Aberdeen and Scotland an increasingly academic profile and promoting links between bench and bedside.

The increase in clinical activity and subspecialisation was reflected nationwide throughout the last decades of the 20th century with continued expansion and new appointments throughout the country. With increasing use of clinical measurement/metrology and more complex drug regimes the delivery of care moved from a purely medical model of consultants and trainees to include increasing numbers of professionals from other disciplines. As well as clinical nurse specialists, the rheumatology teams developed autonomous roles for experienced physiotherapists and occupational therapists including the delivery of intra-articular therapies as well as contributing to multi-disciplinary teams. The increasing number of specialist nurses and Allied Health Professionals prompted the move to a more formal structure than that afforded by the popular Scottish Rheumatology Club and the multi-disciplinary Scottish Society for Rheumatology was established with Professor Nuki as its first President in 2001.

The first meeting was hosted by Dr Robin Munro (Lanarkshire) at the unusual venue of Hamilton racecourse! The much enlarged membership necessitated a standing committee and formal administrative structure and the Society's first secretary Alan MacDonald and his successor Margaret Duncan developed a professional platform for the Society and subsequently contracted the provision of a secretariat and website with the Royal College of Physicians of Edinburgh (www.scottishrheumatology.org.uk). The Society is gradually evolving into an important nucleus of nationally co-ordinated professional organisation and training, and fosters integrated clinical studies, audit and service developments. A number of special interest groups have been established to harness and synchronise this increasing national expertise and to channel clinical research and audit. The Society has undertaken national audit projects and is working with Quality Improvement Scotland (co-ordinated by Dr Liz Murphy, Lanarkshire) to establish agreed clinical standards. Rheumatologists were early supporters of the SIGN network of evidence based clinical guidelines and Professor Hilary Capell produced a pivotal document on rheumatoid arthritis in 2000.

With an enlarged clinical service at five sites in Glasgow and throughout the country many rheumatologists have developed dedicated clinics for ankylosing spondylitis, psoriatic arthritis, connective tissue and osteoporosis. Paediatric rheumatology services have evolved radically in recent years. Initially delivered on a regional basis by paediatricians as a subspecialty interest, a number of adult rheumatologists subsequently developed combined clinics with local paediatricians. Dr K Goel led the largest specialist paediatric rheumatology service from Yorkhill, Glasgow and the service there expanded with his colleague Dr Galea. In 2002 a Senior Lecturer of Paediatric Rheumatology was appointed with an ARC grant. Janet Gardner-Medwin initiated the nucleus of a national clinical network. The appointment of Joyce Davidson in 2005 allowed an expansion of the service in Glasgow and also encompassed twice weekly clinics in Edinburgh and visiting clinics in several other Scottish centres and her colleague expanded an academic and teaching role. This important and demanding national service was acknowledged in 2008 with the award of 'Managed Clinical Network' status and the appointment of Dr Jo Walsh to share the commitment to children and adolescents moving to adult clinics.

In general rheumatology, major changes are underway to translate the recent scientific achievements in the collaboration first envisaged by Sir Stanley Davidson. 'Early Arthritis' clinics are widely established to capture patients with rheumatoid arthritis before the onset of irreversible damage and rheumatologists are developing bedside musculoskeletal ultrasound as a diagnostic and monitoring tool. Clinics and day case facilities are developing for the delivery and monitoring of new 'biologic' therapies. These 'designer' drugs have expanding indications which currently include rheumatoid arthritis, ankylosing spondylitis, psoriatic arthritis, lupus, amyloidosis and juvenile idiopathic arthritis. Treatments which are delivered as intermittent infusions or self-administered injections are usually given concurrently with conventional disease modifying drugs (DMARD's) and have necessitated a large supporting infrastructure to support the delivery and monitoring of treatment. In an innovative move rheumatologists have established a UK registry of patients receiving 'Biologic' therapy to extend the experience of phase 3 clinical trials into everyday practice.

The expanding workload resulting from developments in

treatment and the increasing subspecialisation in general medicine has led to continued expansion in teaching and district hospitals since the Millennium. There are physicians with an interest or pure rheumatologists with supporting teams in all but the smallest hospitals although pockets of vulnerability served by single-handed physicians or served by visiting specialists continue in some areas. Academic posts have also increased with a broad and growing range of research interests from Molecular Medicine to Epidemiology. The increasing interface with science has also led to an expansion of appointments of non-clinical scientists. Important collaborations have thus been formed with colleagues researching the basic science of inflammation, immunology and genetics and promise to unlock the still elusive causes and optimal treatments for the common arthritides. Similarly Scottish rheumatologists continue to make major contributions to clinical trials with Dr Duncan Porter (Glasgow) taking on the co-ordination of a multi-centre group established by Hilary Capell.

A number of questions and options face the current generation of rheumatologists, some of which are certainly mirrored in other disciplines. The historical connection to general and acute medicine (receiving) continues to compete for clinician's time and the value of this commitment to a small specialty and its patients in terms of recruitment, training and expertise in multi-organ medical expertise will continue to be debated. Changes in patterns of work with an expanding and increasingly female workforce, legally constrained working time and the enlargement of clinical teams will also require increased and improved communication systems which hopefully will retain an element of direct inter-personal contact as well as ever more sophisticated electronic systems. The expanding repertoire and complexities of therapies for inflammatory joint and bone disease will be greatly amplified as medical therapies for the commoner degenerative arthritides are unveiled and will challenge present and future specialists to ensure rapid 'translation' and to ensure equitable access to our population irrespective of domicile and cost. With an expanding and cohesive new generation of rheumatologists supported by a dynamic national Society the prospects for arthritis patients look bright.

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Table I: Scottish Rheumatologists

	Consultants 2009		Consultants 1985
Dumfries	Dr M MacMuhon		Dr W Penman
Ayr	Dr M Duncan	Dr S Sherry	Dr P Reynolds
South Glasgow	Dr J Larkin Dr E Morrison	Dr S Fraser Dr D Cressie	Dr D Pitcaithly
North Glasgow	Dr J Hunter Dr M Field Dr S Saunders Dr D Porter Dr A McEntagert Dr H Wilson	Dr R Madhok Professor I McInnes Dr D McCarey Dr M-M Gordon Dr M Gupta Dr S Bawa	Dr H Capell Prof R Sturrock Dr J Hunter Dr P McGill
Inverclyde	Dr D Marshall	Dr L Hutton	-
Lanarkshire	Dr A Zoma Dr R Munro	Dr I. Murphy Dr K Donaldson	-
Forth Valley	Dr M Brzeski		-
Fayside	Dr K Morley Professor J Belch Dr M Garton	Dr T Pullar Professor C Lau Dr P Kumar	Dr M Wilkinson Dr K Morley
Fife	Dr J Gibson Dr J MacLaren	Dr H Harris	-
Grampian/Orkney	Dr N Rennie Dr A MacDonald Prof C De Bari	Professor D Reid Dr Hazem Youssef	Dr N Rennie Dr C Eastmond
Shetland	Dr J Unsworth		-
	Dr M Steven	Dr J Harvic	Dr M Steven
Edinburgh	Dr E McRorie Dr V Dhillon Professor S Ralston Dr A Daroszewska	Dr M Lambert Dr N Anafi Dr M Gray Dr P Riches	Prof G Nuki Dr McCormack Dr T Chalmers
Borders	Dr R Richmond		-

Academic Rheumatology in Scotland - 2009		
	Lead	Special Interest
Aberdeen	Prof D Reid Prof G MacFarlane Prof C DeBari	Osteoporosis Epidemiology Translational Medicine
Dundee	Prof J Belch Prof C Lau	Vascular Medicine Lupus
Edinburgh	Prof S Ralston Dr M Gray Dr R Van't Hof	Bone Disease Molecular Medicine Bone Disease
Glasgow	Prof I McInnes Dr M Field	Molecular Medicine Education/Infection

References

1. Currie JP Treatment of rheumatoid arthritis with Butazolidine. Lancet 1952; 260:15 - 16.
2. Fraser TN, Gold treatment in rheumatoid arthritis Ann Rheum Dis 1945; 4: 71-75.
3. Davidson S. Forty - two years as a rheumatologist; an account of JJR Duthie's selection, training and career, 1935-1972 Scott Med J, 23,191-4, 1978.