

EULAR reports

European Union of Medical Specialists (UEMS): Section of Rheumatology, and European Board of Rheumatology (EBR)

MISSION

The aim of the UEMS Section of Rheumatology/European Board of Rheumatology is to maintain the highest level of care with the best outcome for those with musculoskeletal conditions through establishing and maintaining high professional standards amongst rheumatologists in Europe.

OBJECTIVES

- To improve the awareness of UEMS/EBR and its activities among rheumatologists and their national societies, national organisations responsible for training and continuing medical education, and the European Commission; to improve its organisation; communication and influence.
- To raise standards of specialist training by:
 - Establishing standards of training centres
 - Ensuring these standards are met by training centres by processes of accreditation, documentation, and visitation
 - Ensuring that trainees have a comprehensive training according to UEMS/EBR and national standards and that there is evidence of the satisfactory completion of this with the acquisition of appropriate competencies through log books, appraisal, and possibly, by examination
 - Enabling training in different centres within Europe.
- To maintain standards of clinical care by recommendations for requirements for CME
- To ensure provision of appropriate and high quality educational activity; setting and monitoring standards for courses, meetings, and other educational activities
- To promote the development of the speciality of rheumatology.

EXECUTIVE GROUP

President: Professor Anthony D Woolf
 Past President: Professor Basil Thouas
 President elect: (to be elected)
 Secretary: Dr Klaus Bandilla
 Treasurer: Dr Stefaan Poriau
 Coordinators of working groups

MEMBERSHIP

For each European Union or associated country, a representative of the relevant professional organisation and of the academic organisation.

President of EULAR.

Chair of EULAR Education and Training Standing Committee.

WORKING GROUPS

- Accreditation Group (coordinator Martin Seifert)

- Ensuring high standards of the practice and teaching of rheumatology and of research by systems of accreditation against agreed standards
- Training Standards Group (coordinator Hans Bijlsma)
 - Ensuring high standards for specialist training
- CME Group (coordinator Anthony Woolf)
 - Ensuring high standards of clinical rheumatology in practice through establishing and maintaining standards for CME specific to rheumatology
- Rheumatology in Practice Group (coordinator Patrick Sichert)
 - Ensuring the highest standards of rheumatological practice

Each working group has:

- Aims
- Activities
- Membership
- Work plan with deliverables and timelines.

The UEMS Section of Rheumatology/EBR has developed:

- Recommendations for training centres, trainers, and trainees
- A specialist training curriculum and log book
- Charter on CME in rheumatology
- Core curriculum for CME/CPD
- Standards for quality assurance of CME activities.

A database has been developed of specialist training centres throughout Europe.

The UEMS Section of Rheumatology/EBR are developing:

- A European exchange training programme
- Methods to assess rheumatologists which may include examination and visitation:

Surveys have been undertaken looking at:

- Manpower
- Patterns of clinical practice
- Continuing medical education.

The UEMS Section of Rheumatology/EBR is working with the Bone and Joint Decade Education Task Force to develop core recommendations for an undergraduate musculoskeletal curriculum that is applicable globally. Papers on the curriculum development and work on setting standards were presented in March 2003 at the World Federation of Medical Education and in June 2003 at EFORT (European Federation of Associations of Orthopaedics and Traumatology).

A D Woolf
President

EULAR international liaison activities

For a variety of activities with the Bone and Joint Decade, WHO, and the European Community, liaison is being maintained to promote European rheumatology and EULAR.

BONE AND JOINT DECADE

Over 1200 organisations are now supporting the decade

Multidisciplinary national action networks (equivalent to combined scientific and social leagues) have now been established in 51 countries. National coordinators in a further 39 countries are trying to establish more national action networks. The networks work together to gain priority and to improve health care for musculoskeletal conditions.

Forty six governments have now endorsed the decade.

The WHO technical report on the "Burden of musculoskeletal conditions at the start of the new millennium" will be published this year. This provides data on the impact of the different major musculoskeletal conditions throughout the world and gives recommendations for their monitoring.

Data are being supplied to the WHO Global Burden of Disease Project to facilitate the revision of their estimates of the global burden of musculoskeletal conditions. These estimates will be published in the "Global burden of disease 2000" as well as in the annual World Health Report. As a consequence of this work the burden of low back pain and gout are included for the first time, and estimates of the burden of osteoarthritis, rheumatoid arthritis, and other musculoskeletal conditions have increased for rheumatoid arthritis, osteoarthritis, osteoporosis, back pain and trauma.

A core set of indicators is being developed for various musculoskeletal conditions within the framework of the WHO International Classification of Functioning, Disability and Health (WHO ICF).

A collaborative programme of further work is being developed with the WHO, Geneva.

Educational standards are being raised for all doctors by the development of recommendations for a core undergraduate musculoskeletal curriculum. This has been in consultation with a wide range of relevant organisations, covering rheumatology, orthopaedics, and rehabilitation. It has been endorsed by the American College of Rheumatology. It has been submitted for publication.

LIAISON WITH THE WHO EUROPEAN REGIONAL OFFICE

Health promotion schemes throughout Europe within the CINDI programme are being developed. These will co-promote the benefits of healthy lifestyles—for example, diet and physical activity, for musculoskeletal conditions along with their benefits for cardiovascular disease.

Communication is continuing with the European Observatory of Health Systems.

EUROPEAN UNION

Two projects are running with support from the European Community Directorate of Public Health.

The European Bone and Joint Health Strategies Project is developing a common public policy from existing knowledge to deal with risk factors to musculoskeletal health (prevention) and to enable people with musculoskeletal conditions to enjoy their full health potential (treatment). Recommendations will be made for their implementation. This is also in collaboration with EFORT and IOF.

The European Bone and Joint Indicators Project has first summarised the health status indicators currently being used in Europe and then made recommendations for a set of indicators to monitor health status of the musculoskeletal conditions across the Community.

WORLD FEDERATION OF MEDICAL EDUCATION

The educational activities in rheumatology to raise standards of training and patient care were presented at the World Federation of Medical Education in Copenhagen, March 2003.

OTHER EUROPEAN PROFESSIONAL ORGANISATIONS

European Federation of National Associations of Orthopaedics and Traumatology

A symposium was held at EFORT in Helsinki, June 2003 to present the "European Bone and Joint Strategies Project", which is being undertaken by a partnership of the Bone and Joint Decade EULAR and EFORT. This provided an opportunity to discuss the interaction between rheumatology and orthopaedics for a spectrum of rheumatic diseases.

A symposium on education included activities undertaken in rheumatology to raise educational standards.

European Health Promotion Association

Liaison has been established with the European Health Promotion Association for the dissemination and implementation of European health strategies. There is also liaison with individual national health promotion agencies through the WHO Europe CINDI programme.

European Public Health Association

Liaison has also been established with the European Public Health Association for the dissemination and implementation of European health strategies.

A D Woolf

anthony.woolf@rcht.swest.nhs.uk

EULAR Standing Committee on International Clinical Studies Including Therapeutic Trials (ESCISIT)

The EULAR standing Committee on International Clinical Studies Including Therapeutic Trials has over 10 working groups covering all areas in the field of rheumatology. As it is impossible to give you in this short overview all the achievements of the past year I kindly invite you to have a look at our newsletter, which was published two to three times a year during the past three years and distributed to all committee members and the national societies. In addition, during the EULAR congress in Lisbon most of the working groups presented their activities during special standing committee sessions.

In December last year the first meeting of the European Scleroderma Group (named EUSTAR) was held in Florence. This group coordinates the different scleroderma studies in Europe and helps to improve the care given to patients with scleroderma by organising, among other things, educational courses.

The working group on polymyalgia rheumatica has developed new diagnostic and response criteria, which were presented during the EULAR 2003 meeting.

The working group on disease activity in rheumatoid arthritis has developed a disease activity score using C

reactive protein as the acute phase response instead of the erythrocyte sedimentation rate. This was presented in a working group session at the EULAR 2003 meeting. The EULAR handbook on clinical assessments developed by this working group has been used widely in past years, and the second updated edition will be published shortly. Studies, in cooperation with the American College of Rheumatology and OMERACT (Outcome Measures in Rheumatology Clinical Trials), are continuing to define criteria for low disease activity in daily clinical practice.

I have been chairman of this committee for four years and it is now time to resign. It has been a great pleasure and honour to work with a group of such enthusiastic European rheumatologists. However, there is still a lot to achieve, and I am therefore pleased that Professor Maxime Dougados has agreed to take over the job as chairman, and I wish him and the committee all the best for the future.

P van Riel

P.vanRiel@reuma.umcn.nl

Standing Committee for Education and Training

VII EULAR POSTGRADUATE COURSE

The VII EULAR Postgraduate Course in Rheumatology took place in Budapest from the 22 to 27 September 2002. The faculty included over 30 highly renowned scientists and clinicians from Europe and North America. The audience comprised 96 doctors (mostly rheumatology trainees) coming from almost all the European countries and from Africa and the Middle and Far East. An evaluation of the course was published in the *Annals of the Rheumatic Diseases* (2003;62:286).

It was planned that the 2003 course should take place in Istanbul, this September, but owing to the war in Iraq it has been postponed to September 2004.

BURSARIES

We have expanded our *Training Bursaries Programme*: 10 such bursaries are now offered twice a year, each supported with up to €7000.

The number of *Travel Bursaries* to the Annual Congress, sponsored with up to €1500, has now been increased to 50 a year.

Both these programmes are directed towards young European rheumatologists, with preference being given to countries with special economic and educational needs.

We have started a *Visiting Professor Programme*, with 10 bursaries a year, each supported by up to €7000. We have received only one application so far this year and would appreciate your help in making this exciting opportunity widely known.

SPECIAL INTEREST WORKING GROUPS

The committee now has three special interest working groups.

Online education

The *On-line Education Working Group*, chaired by Professor Bernard Duquesnoy from France, is finalising work on a European joint venture to launch a EULAR web course on "Inflammatory rheumatic and systemic diseases". A proposal will be submitted to the EULAR executive committee shortly.

Undergraduate education

The *Undergraduate Education Working Group*, chaired by Professor Michael Doherty from the United Kingdom, is currently organising a "Teach the teachers" course to take place in 2004.

EURORITS

The *EURORITS Working Group*, chaired by Dr Suzanne Lane from the United Kingdom, brings together all the young representatives on our committee. They had their first independent meeting at the 2003 EULAR Congress, and we hope they will give us vital support in identifying and helping to solve the main problems faced by rheumatologists in training around Europe.

EULAR COURSES

The Education Committee was given the task of coordinating and monitoring EULAR courses dedicated to several educational objectives. We were directly involved in setting the scientific content of the *VIIIth EULAR Sonography Course*, which took place in Rome in October, the *3rd EULAR Clinical Skills Course*, which took place in Copenhagen in September, and the *1st EULAR Course on SLE*, organised in cooperation with Professor Stefano Bombardieri, which was held in Italy in August.

All these courses were intensive and interactive in their design and specially oriented towards the young

rheumatologist. Two other courses, one on capillaroscopy and one on systemic sclerosis are currently being evaluated.

In agreement with the executive committee, EULAR gives no financial support to the organisation of these courses but offers a set number of scholarships to attendees.

FURTHER NEWS

The Education Committee will continue to cooperate with the European Union of Specialist Physicians (UEMS) whose rheumatology board, now chaired by Professor Anthony Wolf, is seeking new and higher standards of qualification and continuous medical education for European rheumatology.

The Standing Committee for Education and Training has continued to expand its work since the last General

Assembly. One of the major difficulties we face in our work relates to contacting and nominating representatives of the different national societies. All the national societies are asked to ensure that they have two nominated representatives on this committee—one senior and one junior, representing the trainees. This committee's work would also be strongly enhanced if these representatives presented an annual report of their work.

According to the new EULAR regulations, I will continue as chairman of the Education Committee until June 2005, and a new candidate for chairman will be submitted to next year's General Assembly.

J A P da Silva

Chairman of the EULAR Standing Committee for Education and Training

Health Professionals Committee: key activities 2002–3

STRATEGIC PLAN

In June 2002 the committee adopted a strategic plan, which set out the following aims for the committee:

- To promote high quality evidence based practice in therapeutic intervention to ensure that people with arthritis and rheumatism in Europe receive the best possible care
- To promote the unique role of health professionals within the rheumatology multidisciplinary team, including clinicians and people with arthritis and rheumatism
- To support health professionals working in the field of rheumatology and their organisations and networks in Europe
- To facilitate the sharing of information, skills, and resources between health professionals in Europe.
- To give a voice to health professionals in rheumatology in Europe through a strong, representative, and effective committee.

STRATEGIC OBJECTIVES

Since July 2002, the committee and secretariat have worked on a number of key year 1 strategic objectives to meet these aims, including:

- *Launching an allied health professionals research scheme.* This has been an overwhelming success, with over 20 applications received in the first round. The award was given to Gillian Gilworth for her project "Cross-cultural adaptation of RA work instability scale".
- *Evaluating and monitoring the scheme.* As part of our commitment to monitoring and evaluating our work, a full evaluation was carried out, and each entrant questioned about the scheme and the application process. The results were reviewed by a working group in Lisbon so that future schemes can be improved.
- *Developing a high quality programme for the EULAR Congress.* A full programme was developed for the EULAR Congress in Lisbon and work has already begun early on the programme for Berlin.
- *Developing the research agenda.* In response to the great interest in the research award scheme, and as part of the second year of our strategic plan, the committee has

focused on the research needs of allied health professionals in the rheumatology community. This was discussed at the EULAR Congress in June 2003.

- *Publishing two newsletters a year.* The first of these was distributed in December 2002 and a newsheet was prepared for the EULAR Congress.
- *Launching a travel bursary/educational visit scheme.* This scheme has started and a grant awarded for an educational visit to the Netherlands. Initial interest has been less than was expected, and a working group met during the Lisbon EULAR Congress to discuss how to develop the scheme and to raise awareness.
- *Electing a new Chair.* Jaana Hirvonen, Finland, has been elected Chair of the Committee.
- *Developing and expanding the allied health professionals network in Europe.* A wider email distribution list has been created so that information on EULAR activities can be circulated directly to health professionals around Europe, raising the profile of EULAR and the committee, and ensuring that as many health professionals as possible benefit from these opportunities. For example, 95% of applicants for the research prize were non-committee members.
- *Increasing representation on the committee.* Countries which currently have no representative have been contacted and invited to nominate a representative. Any countries currently unrepresented are invited to contact the secretariat.
- *Improving governance and management of the committee.* Job descriptions have been developed for key roles on the committee. Working groups also met in Lisbon to evaluate the outcome of 2002 activities, including the Research and Educational Visit award schemes, as part of our commitment to monitoring our activities against the strategic plan.
- *Publishing and circulating the strategic plan.* The plan has now been widely circulated to health professionals in Europe, where it has been well received.
- *Ongoing administration.* ARMA continues to provide a management and administrative service for the committee through email and paper mailings.

Nora Price
Chairperson

EULAR Standing Committee on Paediatric Rheumatology: 2003

The Paediatric Standing Committee has continued in its valuable cooperation with the related European organisations in paediatric rheumatology—that is, Paediatric Rheumatology European Society (PRES) and Paediatric Rheumatology International Trials Organisation (PRINTO). Several of the standing committee's country representatives are also members of, and active participants in, activities of those organisations. Some specific activities are highlighted below.

SCIENCE

The validation of "core set of outcome" for juvenile dermatomyositis (JDM) and juvenile SLE is in progress. Many patients from several countries have been entered into the database. A consensus conference on "Definition of improvement for JDM and JSLE" was held in Genova, Italy, September, 2003.

Working groups for scleroderma, JDM, CINCA, recurrent fevers, and vasculitis are making progress.

EDUCATION

- The standing committee and members of PRES participated as lecturers in paediatric rheumatology in the EULAR course in rheumatology in Budapest, September 2002.
- PRINTO has received a third EU grant to create a web site with information on paediatric rheumatic disease directed to families.

- In addition PRINTO has received a fourth EU grant to arrange 24 scholarships for Latin American recipients to come to Europe and four scholarships for European recipients to go to Latin America.
- PRES is continuing to work with the authorisation of centres for continuing education in paediatric rheumatology.
- EULAR has decided to support a European course in collaboration with PRES in paediatric rheumatology to be held in an Eastern European country in 2004.

MEETINGS

In the evaluation of the joint meeting EULAR/PRES in Stockholm, June 2002, most of the standing committee members were very positive and wished to continue with joint meetings every third or fourth year. One problem was the congress fee which was high for paediatric rheumatologists, who are seldom sponsored. More bursaries, especially for young colleagues, are needed for the next joint congress. The recent annual PRES meeting was held in Stresa, Italy, September 2003.

FURTHER INFORMATION

For further information visit the website at <http://www.pres.org.uk> where you will also find links to EULAR and PRINTO or <http://www.eular.org> where you will find a link to PRES.

B Andersson-Gäre

Chairman, Standing Committee on Paediatric Rheumatology;
boel.andersson-gare@ljfj.kpg.se

Social Leagues Committee: key activities 2002–3

This has been a highly active period for the committee. Under the new secretariat arrangements, the committee has been able to develop its work programme in some new areas (for example, educational visit awards), in addition to developing a strategic plan. Key activities for the committee in 2002–3 include:

- *Developing a strategic plan.* This has been a major undertaking involving a working group with representation from France, Sweden, Portugal, Poland, Germany, and the United Kingdom. The Social Leagues Committee met to discuss and agree the key aims and objectives for the next three years during special sessions at the congress.
- *Arthritis Patients On the Move (APOM) meeting in Lisbon 21–24 November 2002.* The 5th annual conference for Social Leagues, organised with the support of Merck Sharp and Dohme, was an overwhelming success, attended by over 80 participants from 19 countries.
- *Developing an educational visit award scheme* for Social Leagues to support organisations wishing to gain skills and expertise from other more experienced organisations. This exciting new initiative is the first of its kind for the Social Leagues Committee. Four grants (totalling €20 000 for 2002 and 2003) were awarded as follows:

- Society of Patients with Rheumatism in Poland (educational partner: Finnish Rheumatism Association)
- Hellenic and Cypriot Leagues Against Rheumatism
- Portuguese League Against Rheumatism (educational partner: Swiss League Against Rheumatism)
- Latvia and Lithuanian Leagues Against Rheumatism (educational partner: Swedish Rheumatism Association)

- *Collaborating with MSD on the Take Action Award.* An international prize awarded to patient organisations for campaigning work which best promotes the agreed priorities of the Social Leagues.
- *Developing a high quality Social Leagues programme,* including a scheme for awarding EULAR bursaries to attend the EULAR Congress.
- *Stene Prize.* A Stene Prize jury chaired by Merethe Storødegård, Norway, selected Nanna Valentin Gaarde from Denmark as the 2003 Stene Prize winner.
- *Manifesto for people with arthritis/rheumatism in Europe.* Social Leagues has continued to have a leading role in this initiative. Important developments in 2002–3 included the consensus statement on "Access to treatments" and

conferences in October 2002 (Berlin) and March 2003 (Brussels).

- *General administration* of the committee: including mailings; dealing with queries from members; liaison with

other projects—for example, BJD and Manifesto; supporting officers; liaison with EULAR.

L Euler-Ziegler
Chairperson

EULAR Standing Committee of Investigative Rheumatology: report of activities 2002–3

The members of this group have been very active as can be seen from the reports listed below, which were presented in detail during the last meeting of the European Workshop of Experimental Rheumatology and the EULAR Congress in Stockholm. The work is primarily carried out by the study groups, of which there are four currently active—Laboratory Investigations, Genomics, Gene Therapy, and Genetics. A new approach will be carried out in the Cytokine Study Group, which will examine—among other topics—the role of cytokine biology in treatment with biological agents. A proposal has also been put forward to form a new study group on “Mesenchymal stem cells”, which appears to be very interesting and timely. All EULAR members active in the fields of investigative rheumatology, especially in the areas of the study groups, are asked to participate in the work of the respective groups. The contacts of the study group leaders are given below.

WORKSHOPS

The EULAR Standing Committee of Investigative Rheumatology will organise a “hands on” workshop on laboratory techniques dealing with issues including ANA diagnostic, ELISA techniques, molecular biology approaches, standardisation and quality control. Like other successful EULAR workshops, such as the one on arthrosonography, it will rotate between the institutions of the member countries and will enable small groups of rheumatologists to learn standard and cutting edge technology in laboratory determinations, including the theoretical background. There will be an organising faculty from various member states. The first workshop will be held in Copenhagen, and the programme will be prepared by Allan Wiik.

There was also a workshop on genomics in Stockholm in October 2003. Owing to limited funding and the special nature of this meeting, which dealt with cutting edge topics in genomics and proteomics, participation in this workshop was primarily confined to experimentally active researchers in this field.

G R Burmester

Chairman, EULAR Standing Committee of Investigative Rheumatology, Department of Rheumatology and Clinical Immunology, Charité University Hospital, Humboldt University of Berlin, Schumannstr 20-21, 10098 Berlin, Germany; gerd.burmester@charite.de

EUROPEAN CONSENSUS FINDING STUDY GROUP ON LABORATORY INVESTIGATION IN RHEUMATOLOGY

The 10 serum samples that were distributed this year were selected from 22 candidate sera, which were first analysed in great detail by the laboratories in London, Karlsruhe, and Copenhagen. This included radioimmunoprecipitation using [³⁵S]methionine labelled (recombinant) autoantigens. The selected sera (1, 4, 5, 6, 8, 10, 11, 12, 13, and 17) were sent to

Karlsruhe, where they were aliquoted and then forwarded to the participating laboratories. CD-ROMs containing a number of ANA patterns were prepared by Peter Charles and Allan Wiik and also dispatched to the participating laboratories. The data received in London were analysed by Peter Charles and coworkers and were discussed at a meeting in Noorwijkerhout. The results of the consensus round 2001–2, overall, were quite satisfactory. The tendency over the years for better consensus in the field of autoantibody measurement in rheumatology was confirmed. There is general agreement amongst the participating laboratories that these consensus rounds should be continued, including the ANA pattern recognition CD. Most of these laboratories are reference laboratories in their respective countries and these annual efforts keep us all focused.

The organising committee has applied to EULAR for financial support which, in the meantime, has been granted by the Executive Committee of EULAR. Meanwhile, we gratefully acknowledge the support in the distribution of the sera and the extensive pretesting by Lab Seelig. Participants are now asked to donate sera for next year’s round. It has been agreed that ANA results next year will be reported under two headings: nuclear staining and cytoplasmic staining.

R Smeenk

Amsterdam, The Netherlands

A Wiik

Copenhagen, Denmark

GENOMICS STUDY GROUP

In the genomics workshop held at the EWRR in Marseille on the 27 February lively discussions were held on the progress of genomics research. Two general overviews were presented by Tom Huizinga (Department of Rheumatology, Leiden University Medical Centre, The Netherlands) and Gerd Burmester (Department of Rheumatology and Clinical Immunology, Charité University Clinic, Berlin, Germany), which served as a starting point for the discussions.

It was emphasised that much progress has been made in the identification of genetic regions involved in the susceptibility to rheumatoid arthritis (RA). However, these regions are still broad, and great problems have arisen in identifying the risk genes involved. As each population is unique and has developed under different evolutionary pressures, the linkage between different genetic markers may be different in different populations. The number of families with the same homogenous genetic background needed to identify risk genes should be calculated, given that current data on multicase families have led to an estimation that at least 5000 such multicase families are needed. Other sources of information are required to make progress.

Dr Burmester presented results from array data on resting versus activated macrophages, based on the hypothesis that

gene expression profiles in activated macrophages are indicative for pathogenetic pathways in RA. He demonstrated the presence of some of these clusters of monocyte activation genes in monocytes from patients with RA. Moreover, he showed that the expression of a number of these gene clusters could be down regulated if those patients with active RA were treated with the anti-tumour necrosis factor monoclonal antibody, adalimumab.

Lars Klareskog (Karolinska, Stockholm, Sweden) suggested that the time had come to integrate these different sources of information into one project, in which data on transmission and association of genetic variants were combined with data on expression and data on pathophysiology to identify mechanisms to cure autoimmune diseases.

It was agreed that such an integrated project would be designed for the next deadline.

T W J Huizinga

Secretary of the Genomics Study Group

EUROPEAN SYNOVITIS STUDY GROUP

The synovium lines the non-cartilaginous surfaces of the synovial joints and provides nutrients to avascular structures like cartilage. Because RA is an inflammatory disease that primarily affects the synovium, it can be expected that examination of synovial tissue (ST) may provide insight into the pathogenesis of the disease. Recently, there has been an enormous upsurge in investigations of the pathological changes of synovium in RA and other arthritides because of the availability of new methods to obtain synovial biopsy specimens and because of the development of immunohistological methods, *in situ* hybridisation, the polymerase chain reaction, and microarray analysis for examination of the tissue.

Studies of ST are increasingly the subject of scientific communication and ST analysis might become a diagnostic and prognostic tool in clinical practice. Therefore, standardisation of the methodology is mandatory. The European Synovitis Study Group, formed by research groups from Amsterdam, Dublin, Leeds, Leiden, and Stockholm, have addressed several methodological questions in the past eight years—for instance, questions about the optimal technique to obtain synovial biopsy specimens; sampling error and variability; the most efficient and reliable systems to evaluate tissue sections; and questions about quality control. In addition, guidelines have been developed for training rheumatologists in arthroscopic techniques. Continuing studies focus on microscopic measurement of inflammation in synovial tissue (MicroMIST), macroscopic measurement of inflammation in synovial tissue (MacroMIST), and the collection of well defined patient material for genomics, transcriptomics, and proteomics analysis (Synoviomics Program).

The process developed informally with biannual meetings, and a useful forum has evolved for discussing research protocols and data that incorporated synovial biopsy analysis. The group is now represented on the EULAR Investigative Rheumatology Committee. In addition, the original European focus has been widened by regular collaboration with other investigators in America and Australia. Synovial tissue analysis as an outcome measure in clinical trials has also been included as a special interest group session in the programme for the OMERACT meeting in 2004.

P P Tak

Clinical Immunology and Rheumatology, Academic Medical Centre/ University of Amsterdam, The Netherlands; P.P.Tak@amc.uva.nl

B Bresnihan

St Vincent's University Hospital, Dublin, Ireland

GENE THERAPY STUDY GROUP

The Work Group on Gene Therapy in Arthritis presented data in Marseille, 27 February 2003. The group is active, with a high quality of scientific exchange, as the field of gene therapy is changing. One major limitation for the clinical application of gene therapy in joint diseases is the safety of the procedure and the available vectors. The gene therapy trial conducted on 11 SCID children was shortened because of leukaemia induced by the vector. The oncogene activation was shown to be related to the mutagenesis induced by the retroviral vector. Thus we need to improve our vectors before planning any clinical trial in rheumatoid arthritis.

Two areas of research are open: viral vectors, with long term expression, and non-viral technology. The most widely used viral vectors are adenoviruses, but these are limited by their non-specific inflammation, and retroviruses. The most promising vectors are lentiviral derived or recombinant adeno-associated viruses (rAAV). Professor Tak's team presented recent data on new rAAV serotypes that might be more efficient for synoviocyte transfection. However, the diffusion of these vectors after intra-articular injection remains to be determined. Dr Apparailly from Montpellier reported results concerning non-viral inducible and tightly regulated cytokine expression. She used electroporation *in vivo* in the muscle to obtain sustained IL10 expression. This technology improved inflammation in the collagen induced arthritis model. A second approach to restore immune homeostasis is to use genetically modified dendritic cells. Dr Tarner from Regensburg demonstrated elegantly the homing of these cells to the inflamed paws using a cooled CDD camera in arthritic animals. He was able to show *in vivo* that the homing to the joints after IV injection of dendritic cells was specific to type II collagen.

To improve our knowledge we decided to share a common database with the available vectors, plasmids, promoters, cell lineage, or animal models. All laboratories interested in this European collaboration will have access to these tools. This constitutes the first step for a European collaborative network. We will apply within the call of the 6FP programme from the EU community for a Network of Excellence, and Thomas Pap will coordinate this initiative. An international meeting in the field of cell and gene therapy in bone and joint disorders will be organised in May 2004 after the success of the meeting in Montpellier. It was suggested that this workshop would be held in Amsterdam, and we hope the participants will join us for a discussion of innovative and advanced technology in arthritis.

C Jorgensen

Chairman of the Gene Therapy Work Group

STUDY GROUP ON GENETICS IN RA

Evaluation of genetic influences on the susceptibility to, and clinical course of, rheumatoid arthritis has been substantially hampered by the large number of patients needed for statistical evaluation owing to the high variability of the polymorphic areas in the genome and the many resulting markers. In large multicentre studies, twins and families are collected for genome wide screens that require DNA samples from thousands of patients and their progeny pedigree ancestors. Patient recruitment in such multicentre genetic studies is often limited to a singular time point at study inclusion, while the clinical course of the disease can either not be documented or has to be reconstructed retrospectively by chart review. For the longitudinal analysis of treatment effects and of the progression of erosive disease, prospective patient recruitment would be necessary, which requires large logistic efforts and long observation periods before conclusive results could be expected. Consequently, the focus of the

existing multicentre studies is often the identification of disease susceptibility markers, while predictors of differential clinical outcome are characterised less accurately.

On the other hand, numerous clinical studies have been performed prospectively in different centres in Europe, with controlled treatment options and detailed documentation of the radiographic progression of joint destruction. In those studies the primary aim was not a comparison with unaffected siblings or other family members for identification of genetic factors influencing disease susceptibility, but the dissection of parameters influencing the structural damage and functional disability resulting from the diverse clinical courses of the disease.

The drawback of such single centre studies is clearly their limited cohort size. In particular, the recruitment of patients with the most severe clinical courses, which include those with high systemic activity, extra-articular manifestations of the disease and major organ vasculitis, is often limited to only a small number of patients because they are found infrequently even in tertiary referral centres. Yet the identification of patients at risk from life threatening manifestations of the disease, with the help of distinct genetic markers, would be of great importance for treatment decisions early in the course of the disease.

To create a platform for cooperation between centres involved in clinical research on genetic influences on the disease course of RA, representatives of a number of those centres met in Leipzig last year and suggested setting up a "Study Group on Genetics in RA" under the umbrella of the EULAR Standing Committee on Investigative Rheumatology, which was approved by ESCIR in Stockholm in June 2002.

The aim of the Study Group on Genetics in RA is, therefore, to find a means of combining patient cohorts collected in different European centres in order to increase the statistical

validity of genetic analysis. One of the suggested possibilities is the exchange of DNA samples from the banks established in the different centres for analysis of specific markers. In addition, technological efforts in those centres during the establishment of new techniques can be synergised by offering those typing methods for the analysis of DNA samples collected in other centres.

Over the past year, a first attempt at collaboration has been made by exchanging DNA samples from a well characterised and repeatedly published patient cohort in Leipzig with other centres. In a research project with the group of R Kinne (Department of Experimental Rheumatology, University of Jena, Germany), germline mutations of c-fos and c-jun are analysed, while a continuing collaboration with the group of PD Wassmuth (Institute for Transplantation, Diagnostics and Cell Therapeutics, University of Düsseldorf) focuses on cytokine polymorphisms. In addition, immunogenetic typing for a cohort of patients with RA collected by G Keysser (Department of Medicine, University of Halle, Germany) has been performed by the group in Leipzig.

A new impulse for the assessment of genetic markers might also come from new technology that can be automated, allowing larger numbers of samples to be analysed in short periods of time. One example is a new typing facility that has been installed by the group of P Ahnert in Leipzig, which uses an automated single base extension method for the determination of multiple polymorphisms at "one shot" to analyse the influence of single gene variants and, more importantly, patterns of gene variants

The Study Group on Genetics in RA invites all interested groups to discuss future directions.

H Häntzschel, C Baerwald, U Wagner
Study Group on Genetics in RA