EUROPEAN LEAGUE AGAINST RHEUMATISM
THURSDAY EDITION

eular Congress News

15TH Annual European Congress of Rheumatology • 11-14 June 2014 • Paris

## THURSDAY, 12 JUNE
## At a Glance

| | |
|---|---|
| **Registration** | **07:45-19:15** |
| **Exhibition** | **08:00-17:15** |
| **Scientific Sessions** | **08:15-17:00** |

**08:15-09:45**

**Basic and Translational Science Sessions**

Lipid mediators and inflammation *Room 342*

Stem cells and inflammation *Room 352*

**10:15-11:45**

**What is New (WIN)**

WIN session 2 *Grand Amphi*

**Abstract Session**

Novel non-TNF biologics treatment of RA *Room Ternes*

Rheumatoid arthritis: Predictors, prognosis, and outcome *Meridien I (Renoir)*

SLE, Sjögren's syndrome – Treatment *Amphi Bordeaux*

New insights into imaging arthritis *Meridien II (Matisse)*

Osteoarthritis clinical aspects *Room Maillot*

What is new with anti-TNFs in RA *Room 342*

Genes, disease activity, and treatment of psoriatic arthritis *Room 352*

Evaluating practice *Amphi Havane*

Scleroderma / myositis: Clinical aspects, prognostic biomarkers, outcome measures *Room 242*

Lupus pathogenesis unravelling *Room 351*

Cytokines and inflammatory mediators *Room 343*

Orphan diseases – What is new? *Room 353*

**How to Treat / Manage (HOT)**

HOT session 3 *Amphi Bleu*

**Schedule** continued on page 14

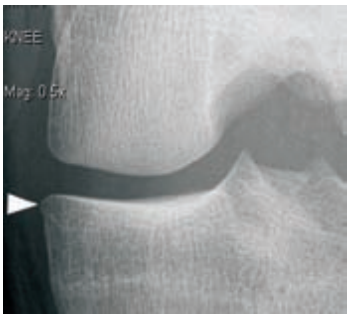
# Changes on MRI Seen Years Before Radiographic Knee Osteoarthritis

Magnetic resonance imaging detects significant structural joint damage several years before radiographic knee osteoarthritis is apparent, according to study findings to be presented this afternoon.

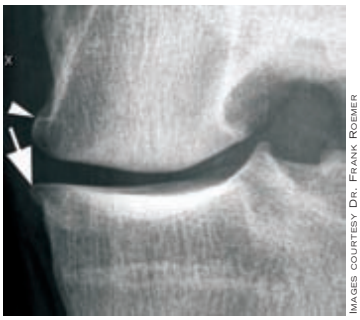
During a Clinical Science Session, Dr. Frank Roemer will report the findings of a nested case-control study looking to see if preradiographic damage could be observed on MRI and if so, how the severity of this damage might influence the risk of incident radiographic knee OA.

"The most important result of our study was to show that osteoarthritis is a disease that starts much earlier than previously thought," Dr. Roemer said in an interview. He is an associate professor of radiology at the University of Erlangen-Nuremberg (Germany) and at Boston University in

**Osteoarthritis** continued on page 2



**AP radiograph shows very small osteophyte at the medial tibial joint margin (arrowhead).**



**3 years later, osteophytes are visible at the medial femoral and tibial joint margins.**

IMAGES COURTESY DR. FRANK ROEMER

# Treat to Target Shows Durable Improvements In Psoriatic Arthritis

Thanks to anti–tumour necrosis factor inhibitors and other highly effective biologic therapies, rheumatologists are increasingly embracing treat to target, a strategy in which patients are closely monitored and medications adjusted until a patient has the least disease activity possible.

*Dr. Arthur Kavanaugh*

Ample evidence from randomised, controlled trials has shown treat to target – sometimes referred to as tight control – to result in better outcomes than standard therapy in rheumatoid arthritis patients.

But in psoriatic arthritis (PsA), a more heterogeneous disorder with skin and nail manifestations as well as joint and connective tissue involvement, remission has historically been less well defined. Only in recent years have endpoints been developed and validated for minimal disease activity in PsA, and evidence in support of a treat-to-target approach is now slowly trickling in.

This morning, Dr. Arthur Kavanaugh of the University of California, San Diego, will present results from a 5-

**Psoriatic Arthritis** continued on page 3

# Survey Gives a Status Report on EULAR's Educational Program

Do you think EULAR has done a good job connecting with and meeting the educational needs of young researchers and clinicians?

That's what Dr. Christian Beyer and his colleagues hoped to find out when they conducted an online survey of clinicians and researchers under the age of 40 who work in the field of rheumatology. The survey was developed by the Emerging EULAR Network (EMEUNET) and the EULAR Standing Committee on Education and Training (ESCET).

*Dr. Christian Beyer*

Dr. Beyer says that taking the pulse of young researchers is especially important in rheumatology, which is going through major changes, particularly in diagnostics and therapeutics. "Training and education play a central role for an auspicious development of rheumatology," said Dr. Beyer, who's an EMEUNET member.

**Educational Program** continued on page 3

# Predictors Seen 1-2 Years Ahead

**Osteoarthritis** *from page 1*

the United States, where he codirects the Quantitative Imaging Center.

Radiography, the most commonly used method to diagnose OA, detects the disease in its advanced stages, notably when osteophytes are present or once there is apparent joint space narrowing. "Our study, with multiple time points analysed, showed us that the 2 years prior to disease diagnosis seem to be the most relevant for the development of disease. It seems that 3-4 years prior to [radiographic] diagnosis, some of the features detected might still be reversible or have less impact for later disease onset."

*Dr. Frank Roemer*

Dr. Roemer, together with colleagues in Austria, Australia, and the United States, examined MRI scans of 710 knees from participants enrolled in the Osteoarthritis Initiative (OAI) cohort. This cohort consists of almost 5,000 individuals with, or at risk of, knee OA, and control subjects with no knee OA, who have been assessed annually over a 5-year period. A total of 355 knees that developed radiographic knee OA by the year 4 assessment point were matched to 355 control knees that did not, based on age, gender, and baseline radiographic score (i.e., a Kellgren-Lawrence grade of 0 or 1).

Annual MRIs were obtained with 3-T scanners that were read for the presence of several structural joint changes, including subchondral bone marrow lesions (BMLs); cartilage damage; meniscal damage and extrusion; and Hoffa and effusion synovitis.

None of the structural features that were observed on MRI 3-4 years before radiographic OA predicted the incidence of radiographic OA, but several of the features present 1-2 years prior to radiographic (incident) OA were strong predictors. Indeed, 2 years before radiographic damage was confirmed, 36.1% of case knees and 20.5% of control knees showed signs of medial meniscal damage (odds ratio, 2.44), and around 60% and 38%, respectively, showed Hoffa synovitis (OR, 2.31). At 1 year before incident OA, Hoffa synovitis was evident in a much higher percentage of incident OA knees, compared with control knees (59.3% vs. 38.5%; OR, 1.71). Incident OA also was associated with effusion synovitis (58.8% vs. 38.8%; OR, 1.76) and medial tibiofemoral BMLs (7.8% vs. 1.2%; OR, 6.5).

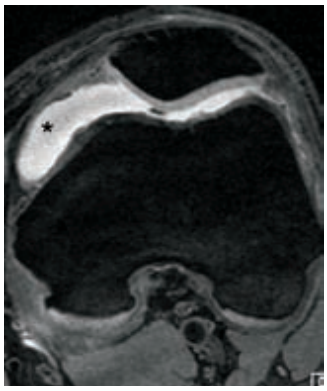
One of the main limitations of the study is that the sample size is relatively small despite the use of data from the OAI, which is currently the largest epidemiologic OA study conducted to date. Another caveat is that the study population is based in North America, and the researchers may assume that their findings are translatable to other populations around the globe, which needs to be proven in future large studies

Asked if MRI should replace radiography for diagnosis of OA, Dr. Roemer answered that diagnosis should still be based on the clinical and radiographic findings in the vast majority of cases, with MRI helping to rule out other differential diagnoses and to clarify any discrepancies between clinical and radiographic findings.

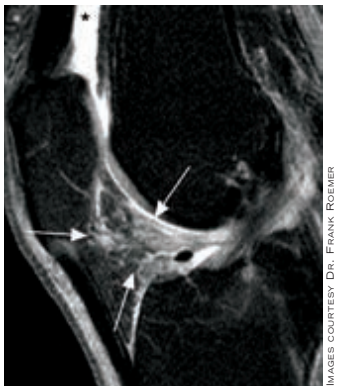
"Until a few years ago, OA was considered a disease of 'wear and tear' of cartilage only," Dr. Roemer said. "MRI has enabled us to understand that OA is a whole-joint disease with multiple tissues interacting closely, and inflammation is an especially important player in early disease. Furthermore … meniscal damage appears to be a key driver of OA disease onset."

The next step will be to disentangle the chronological order of events, he suggested, perhaps with shorter intervals between MRI scans. OA could be triggered by an insult to any joint component, with other insults following, or it could also be a simultaneous deterioration of several joint tissues.

Dr. Roemer is a shareholder of Boston Imaging Core Lab. ■



**An axial MR image of grade 3 effusion-synovitis (asterisk) shows Intraarticular fluid and synovial thickening.**



**Sagittal intermediate-weighted fat suppressed image shows grade 3 Hoffa-synovitis (arrows) in Hoffa's fat pad.**

IMAGES COURTESY DR. FRANK ROEMER

**Clinical Science Session**
**Imaging biomarkers in arthritis. Are MRI/US useful tools?**
Thursday 13:30-15:00
Meridien I (Renoir)

# Eurofever Project Focuses on Autoinflammatory Diseases

A large international registry aims to gather extensive data on the presentation, complications, and treatment response of rare autoinflammatory diseases in both children and adults, according to principal investigator Dr. Marco Gattorno.

Launched in 2009, the Eurofever Project is being conducted in 67 rheumatology centres across 31 countries. So far it has accumulated nearly 3,000 patients, about 70% of whom are children, Dr. Gattorno said in an interview.

"Eurofever registry gives an epidemiological overview of the distribution and prevalence of these rare disorders in Europe and other countries," he said. "The aim was to understand who the patients are and who is following them. The registry is also collecting information on the clinical manifestations and complications associated with different diseases and on the response to treatment from disease onset to enrollment."


An online survey collects information on 15 of these rare diseases. Several present very early in life as sudden-onset, recurrent fever, often accompanied by rash, serositis, lymphadenopathy, or arthritis. Disease flares are usually separated by symptom-free intervals of variable duration, characterised by complete well-being, normal growth, and normalisation of acute-phase reactants. This cycle can result in a considerable delay in diagnosis, the project has determined.

The project also is intended to help rheumatologists decide whether to refer patients for genetic testing, said Dr. Gattorno, a paediatric rheumatologist at the IRCCS Institute Giannina Gaslini in Genoa, Italy.

As an aid to the decision-making process, Eurofever investigators constructed an online diagnostic tool. It asks questions about some crucial items (age, abdominal and chest pain, aphthosis, diarrhea, and family history) that are highly associated with periodic fevers in children. A flow chart then advises the physician whether to refer for genetic testing, which is free when the patient is seen at a participating centre. Dr. Gattorno described the tool as a way "to identify children at higher risk of carrying mutations of genes associated with periodic fever."

"Thanks to the large Eurofever international registry, we are now developing new evidence-based diagnostic and classification criteria for the four monogenic periodic fevers: TRAPS [tumour necrosis factor receptor–associated periodic syndrome], CAPS [cryopyrin-associated periodic syndrome], FMF [familial Mediterranean fever], and MKD [mevalonate kinase deficiency]," he said.

Eurofever is sponsored by the Executive Agency for Health and Consumers of European Union and other EU grants, as well as unrestricted grants by Novartis and SOBI, from which Dr. Gattorno has received speaker's fees. The technical expertise is provided by the Paediatric Rheumatology International Trials Organisation (PRINTO). The registry is actively enrolling patients. Information on the registry and how to participate can be found at the Eurofever website (www.printo.it/eurofever). ■

**PReS Session**
**Autoinflammatory diseases**
Thursday 13:30-15:00
Room Maillot