

[ScienceWatch Home](#)[Inside This Month...](#)[Interviews](#)[Featured Interviews](#)[Author Commentaries](#)[Institutional Interviews](#)[Journal Interviews](#)[Podcasts](#)[Analyses](#)[Featured Analyses](#)[What's Hot In...](#)[Special Topics](#)[Data & Rankings](#)[Sci-Bytes](#)[Fast Breaking Papers](#)[New Hot Papers](#)[Emerging Research Fronts](#)[Fast Moving Fronts](#)[Corporate Research Fronts](#)[Research Front Maps](#)[Current Classics](#)[Top Topics](#)[Rising Stars](#)[New Entrants](#)[Country Profiles](#)[About Science Watch](#)[Methodology](#)[Archives](#)[Contact Us](#)[RSS Feeds](#)

# scienceWATCH<sup>®</sup>.com

TRACKING TRENDS & PERFORMANCE IN BASIC RESEARCH

[Interviews](#)[Analyses](#)[Data & Rankings](#)

2009 : December 2009 - Emerging Research Fronts : David T. Felson on Knee Osteoarthritis

## EMERGING RESEARCH FRONTS - 2009

December 2009



**David T. Felson talks with ScienceWatch.com and answers a few questions about this month's Emerging Research Front Paper in the field of Clinical Medicine.**



**Article: Bone marrow edema and its relation to progression of knee osteoarthritis**

Authors: **Felson, DT**;McLaughlin, S;Goggins, J;LaValley, MP;Gale, E; Totterman, S;Li, W;Hill, C;Gale, D

Journal: ANN INTERN MED, 139 (5): 330-336 Part 1 SEP 2 2003

Addresses: Boston Univ, Sch Med, 715 Albany St,A203, Boston, MA 02118 USA.

Boston Univ, Sch Med, Boston, MA 02118 USA.

Vet Affairs Boston Hlth Care Syst, Boston, MA USA.

Univ Rochester, Rochester, NY USA.

### **SW:** Why do you think your paper is highly cited?

The paper is highly cited because it found, for the first time, two related things:

1: that bone marrow lesions, a common feature of knee osteoarthritis on MRI, identified knees at high risk of progression, and that 2: these lesions were surrogates for malalignment across the knee.

### **SW:** Does it describe a new discovery, methodology, or synthesis of knowledge?

This helped identify a major new feature to help us better understand the pathophysiology and possibly the treatment of osteoarthritis.

### **SW:** Would you summarize the significance of your paper in layman's terms?

The subject was whether bone marrow lesions, as seen on MRI in persons with knee osteoarthritis, predispose to disease progression. Bone marrow edema is a potent risk factor for structural deterioration in knee osteoarthritis, and its relation to progression is explained in part by its association with limb alignment.

**David T. Felson, M.D., M.P.H.**

**Professor of Medicine and Epidemiology Chief, Clinical Epidemiology Unit**

**Boston University School of Medicine**

**Boston, MA, USA**

KEYWORDS: JOINT SPACE WIDTH; RADIOGRAPHIC FEATURES; CLINICAL-TRIAL; MODIFYING DRUG; SCINTIGRAPHY; ALIGNMENT; PAIN.



