

nature insight

INFLAMMATION



Cover illustration
HMGB1-expressing cells in invading pannus tissue in collagen-induced arthritis (courtesy of Ulf Andersson).

Inflammation is the response of an organism's immune system to the damage caused to its cells and vascularized tissues by microbial pathogens such as viruses and bacteria, as well as by injurious chemicals or physical insults.

Although painful, inflammation is usually a healing response. But in some instances inflammation proceeds to a chronic state, associated with debilitating disease such as arthritis, multiple sclerosis, or even cancer. At times, acute local inflammation leads to a body-wide response, which can spiral out-of control leading to major organ failure and death.

In this month's *Nature Insight* we bring together a collection of articles exploring how the inflammatory response is set in motion and ultimately controlled. Other articles take a closer look at the adverse role played by inflammation in the aetiology of some of the most prevalent diseases in modern society, and discuss ways in which both acute and chronic inflammatory processes may be amenable to novel methods of therapeutic intervention.

We are pleased to acknowledge the financial support of AstraZeneca in producing this Insight. As always, *Nature* carries sole responsibility for all editorial content and peer-review. We hope that both general readers and experts in the field will find these articles useful and informative.

Ursula Weiss Senior Editor

review articles:

846 **Points of control in inflammation**
C. Nathan

853 **The inflammatory reflex**
K. J. Tracey

860 **Inflammation and cancer**
L. M. Coussens & Z. Werb

868 **Inflammation in atherosclerosis**
P. Libby

progress:

875 **Mast cells in autoimmune disease**
C. Benoist & D. Mathis

review articles:

879 **Inflammation and therapeutic vaccination in CNS diseases**
H. L. Weiner & D. J. Selkoe

885 **The immunopathogenesis of sepsis**
J. Cohen

Editor, *Nature*: Philip Campbell
Insights Editors: Lesley Anson
Ursula Weiss
Editorial Assistant: Simon Gibson

Art Director: Majo Xeridat
Diagrams: Ann Thomson
Vicky Askew
Suzanne Coleman

Production Editor: Simon Gribbin
Production: Sue Gray
Marketing: Claire Aspinall
Sponsorship: Mark Greene