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## Pre-clinical evaluation of an Interleukin- 6 antagonist in inflammatory arthritis

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The cellular and molecular signals that safeguard the architecture of the joint during an acute flare of inflammatory arthritis are ill defined. Published data from our group clearly identifies interleukin-6 (IL-6) signaling pathway as important factors that alter early inflammation, tissue homeostasis and tissue damage (1-3). We use relevant cell-based in vitro assays and in vivo models to assign specific IL-6 mediated molecular mechanisms that regulate degenerative cell functionality. We also explore the potential value of a pertinent IL-6-directed antagonist as a preventative therapy for early joint injury during experimental inflammatory arthritis. The manner by which the IL-6 pathway regulates cell trafficking during arthritis is characterized and its impact upon bone homeostasis is assessed.

## **Biography**

Anwen Siân Williams completed her PhD at the age of 25 years from the University of Wales Institute of Science and Technology and postdoctoral studies from Cardiff University. She is a pharmacist and senior member of the academic staff at Cardiff University's School of Medicine. Williams is a biomedical research expert who has published over 60 papers in reputed journals. She leads a successful scientific research programme within the Institute of Infection and Immunity that is aimed at delivering excellent teaching and learning opportunities for undergraduate and postgraduate students that is centered upon the study of arthritis.

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