

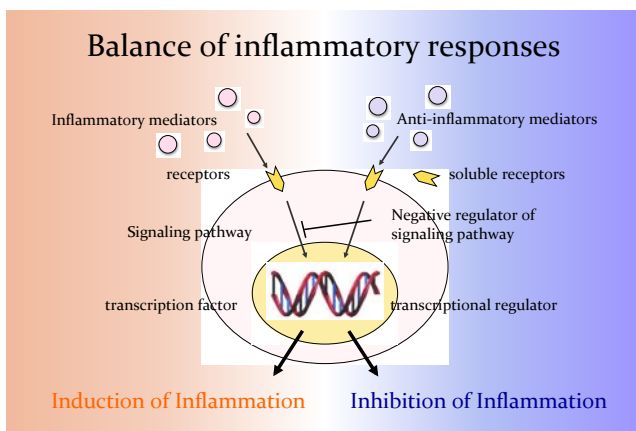


### Introduction

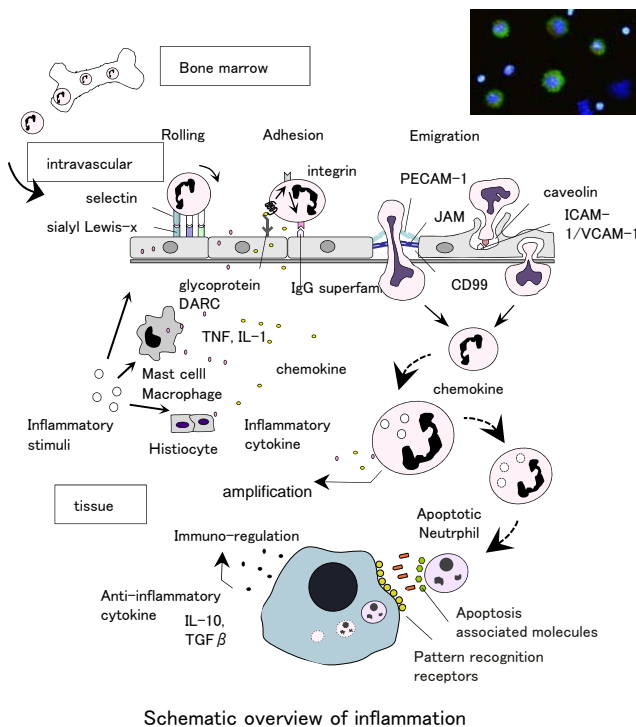
Pathology is the study of diseases and of the changes that they cause. We have focused on the mechanism(s) of diseases, with special interests to inflammation and inflammation related cancer. Our goal is to establish the new strategy for the treatment of diseases based on the scientific evidence.



## Inflammation: the body's first line of defense



The innate immune system provides immediate defense against infection and serves as the first-line of host defense during infection. The recruitment and activation of leukocytes are essential in innate immunity, an event that is governed by a variety of chemical mediators including cytokines. Evidence indicates that excessive production of inflammatory cytokines is critical for the initiation and progression of diseases. It is well known that inflammatory responses are regulated by multiple steps (#1; extracellular, #2; cell surface, #3; intracellular, #4; intranuclear). Advances in inflammation biology appear to pave the new therapeutic strategy for the treatment of clinical inflammatory and inflammatory-associated diseases.



### Research Projects

1. Molecular mechanism of Inflammation
2. Inflammation and cancer
3. Role of cytokines/chemokines in health and disease
4. Cytokine signal transduction in inflammation
5. Inflammation and its epigenetic regulation

### Representative research methods

Cell culture	ELISA
Cell separation	FACS
Animal experiments	Western blot
Immunohistochemistry	RealTime PCR
Immune-precipitation	siRNA

