

# **PAIN**

## **NON-STEROIDAL ANTI-INFLAMMATORY DRUGS (NSAIDs)**

# Pain

- Pain is one way the body tells you there is something wrong and attention is needed

# Pain

(NOCICEPTIVE PAIN)

- Nociceptors
  - Nerves which sense and respond to parts of the body that is suffering from a damage

# Pain

## NEUROPATHIC PAIN

- Results of an injury or malfunction in the peripheral or central nervous system

# Pain

(MIXED CATEGORY PAIN)

- Caused by a complex mixture of nociceptive and neuropathic factors

# Inflammation

- Associated with injuries

# Prostaglandin

- Prostaglandins act on a variety of cells, and have a wide variety of actions:

# COX1 vs COX2

- COX-1 and COX-2 convert arachidonic acid to prostaglandin, resulting in pain and inflammation



# COX1 vs COX2

- Inhibition of COX-1 is undesirable while inhibition of COX-2 is considered desirable

# NSAIDS

- NSAIDs are available OTC

# Adverse effects

- Gastrointestinal (GI) and renal effects

# IN VIVO, ANALGESIC EVALUATION, TECHNIQUES

## Principle

Pain is induced to a suitable animal and the response of the animal to the painful stimuli is recorded before and after administration of the analgesic agent

# CLASSIFICATION OF METHODS

Methods for central analgesic agents:

Methods for peripheral analgesic agents:

# WRITHING METHOD

## Principle

- IP injection of the analgesic agent