

# Novel Markers of Pain in Animals

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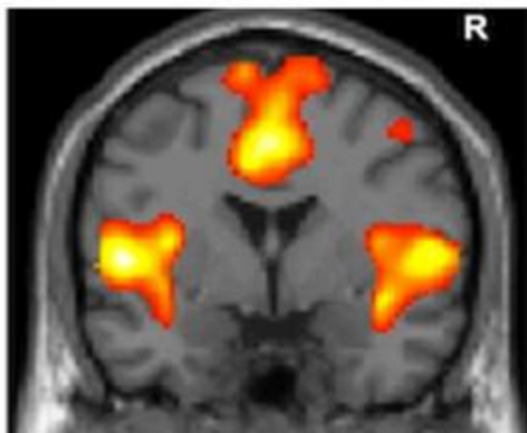
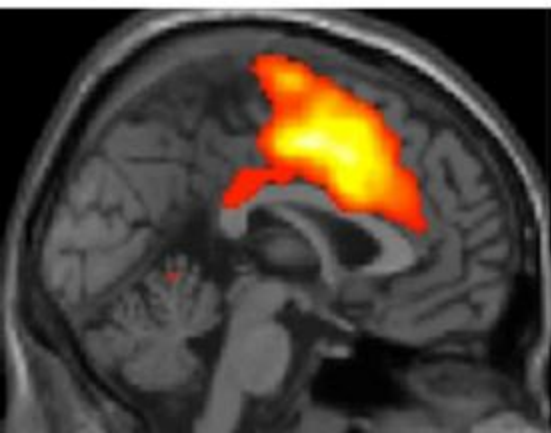
**MEH. IT'S  
TOLERABLE PAIN**



**MODERATE  
PAIN**



**STEPPED ON A  
LEGO PIECE PAIN**



## Background and aim

- › Pain is complex!
    - physical and emotional components
    - difficult to assess in humans
    - “How would you describe your pain on a scale of zero-to-ten, where zero is no pain and ten is a lot of pain?” I don't know. It's not as bad as I've heard labor is, but it definitely hurts. A five? Or is that too middling? Seven? Three? Four-point-eight-nine-three-repeating?
  - › Traditional methods of pain evaluation in animals not ideal?
    - acute vs chronic pain
    - behaviour vs physiology
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## Background and aim

- › Recent advances in pain research
    - neuroimmune mechanisms
    - plasticity
    - fMRI signatures of pain (human)
  
  - › AIM: systematic review of literature
    - Identify potential targets for measuring pain in animals (pigs)
    - Huge volumes of literature in human research – animal models of human pain
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