

Short Range Modalities

Touch/tactile/thigmotactic Stimuli: Direct physical contact between the receiver and another solid object

Hydrodynamic Stimuli : Displacements of fluid medium that can be detected when close to the receiver NOT propagated pressure variations from further signals

Electrical Stimuli: Electrical fields produced by animals or distortions in the electrical fields produced by the receiver.

Allogrooming : Grooming of one animal by another

Proprioceptors: Receptors that detect positions and tensions in muscles

Thermoreceptors: receptors that are sensitive to changes in the environment's temperature

Nociceptors: Specialized pain receptors that identify severely intense stimuli

Mechareceptors: receptors that can detect steady (slow-adapting) or changing (fast-adapting) contacts with the receiver's body surface

Merkel cells: specialized oval-shaped tactile epithelial cells located in the epidermis

Grandry corpuscles: specialized rapidly adapting mechanoreceptors found in the beaks of waterfowl

Ruffini Mechareceptors: slow adapting proprioceptors found in muscle and ligament tissue that detect skin stretch and joint position changes

Golgi tendon organs: slow adapting proprioceptors found in muscle and ligament tissue that detect and help prevent over contraction from muscles

Vibrissae: hydrodynamic sensors located on the snouts of mammals

Passive electroreception: A sensory technique that occurs vertebrates that allows for the detection of the passive electric fields created by other organisms

Passive electrogeneration: Electric fields created by organisms passively

Ampullary organs: main receptors used for passive electroreception