The pain matrix involves a complex network of brain structures and pathways containing both serial and parallel connections.

- The sensory-discriminative aspect of pain, e.g., the bodily location and intensity of the stimulus, which draws on primary (SI) and secondary (SII) sensory cortices.

- The affective-motivational component, i.e., the evaluation of subjective discomfort and response preparation in the context of painful or aversive stimuli, subserved by ACC and anterior insula.