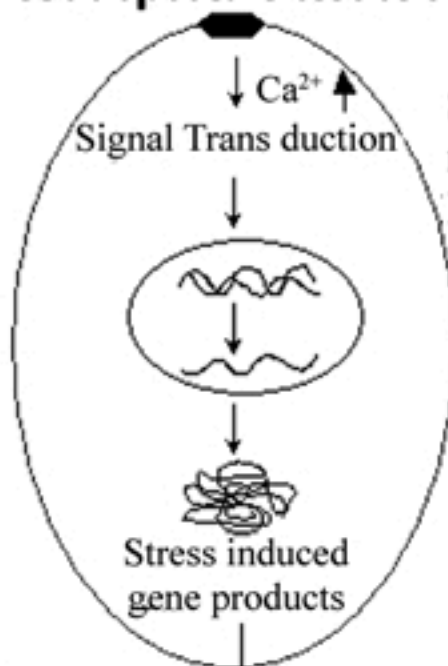


Salinity, drought, cold/heat stress

Signal perceived through membrane

Receptor/ Sensors



Secondary signal molecules: e.g. Ca²⁺
InsP, ABA, ROS

Induction of stress responsive of genes

Indirectly involved e.g.
enzyme of PI metabolism,
transcription factors, etc.

Directly protects e.g. LEA
& antifreeze proteins,
chaperons, enzymes, etc

Altered cellular metabolism

Response

Stress tolerance

(coordinated action of many genes)