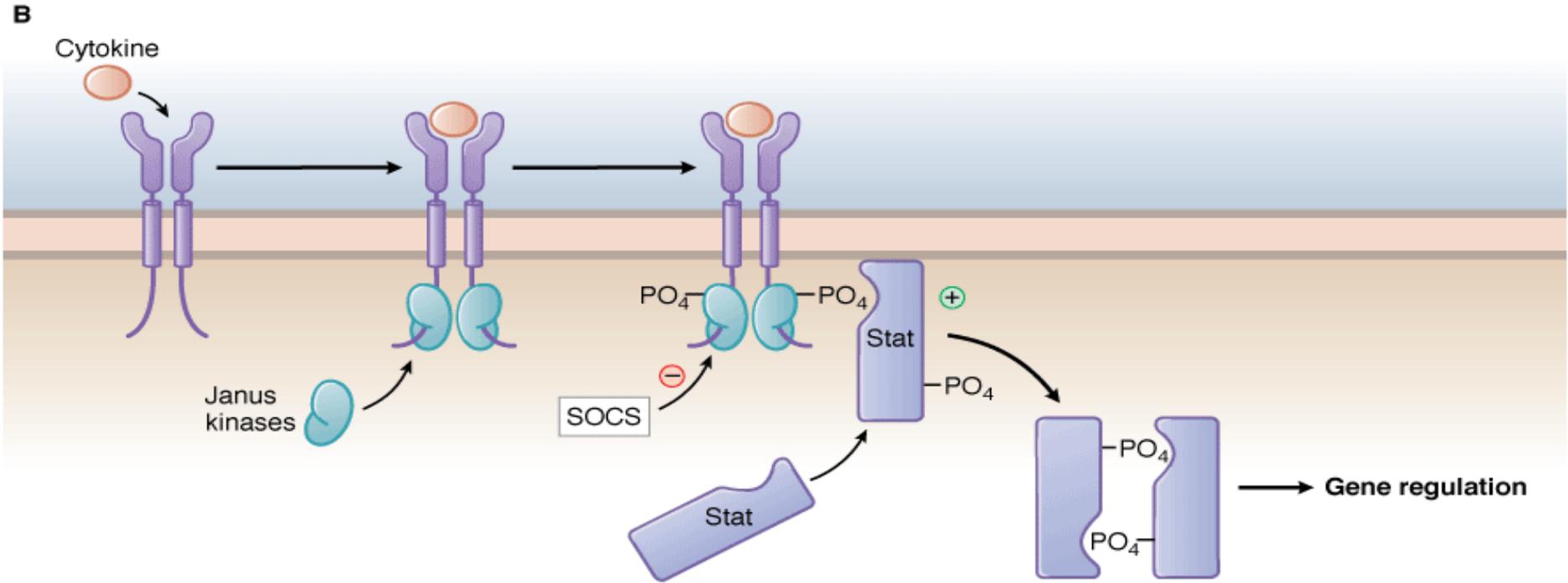


Tyrosine kinase associated receptor

STRUCTURAL FAMILY	FUNCTIONAL FAMILY	PHYSIOLOGICAL LIGANDS	EFFECTORS AND TRANSDUCERS	EXAMPLE DRUGS
<u>Transmembrane,</u> non-enzymes	Cytokine receptors	Interleukins and other cytokines	Jak/STAT, soluble tyrosine kinases	

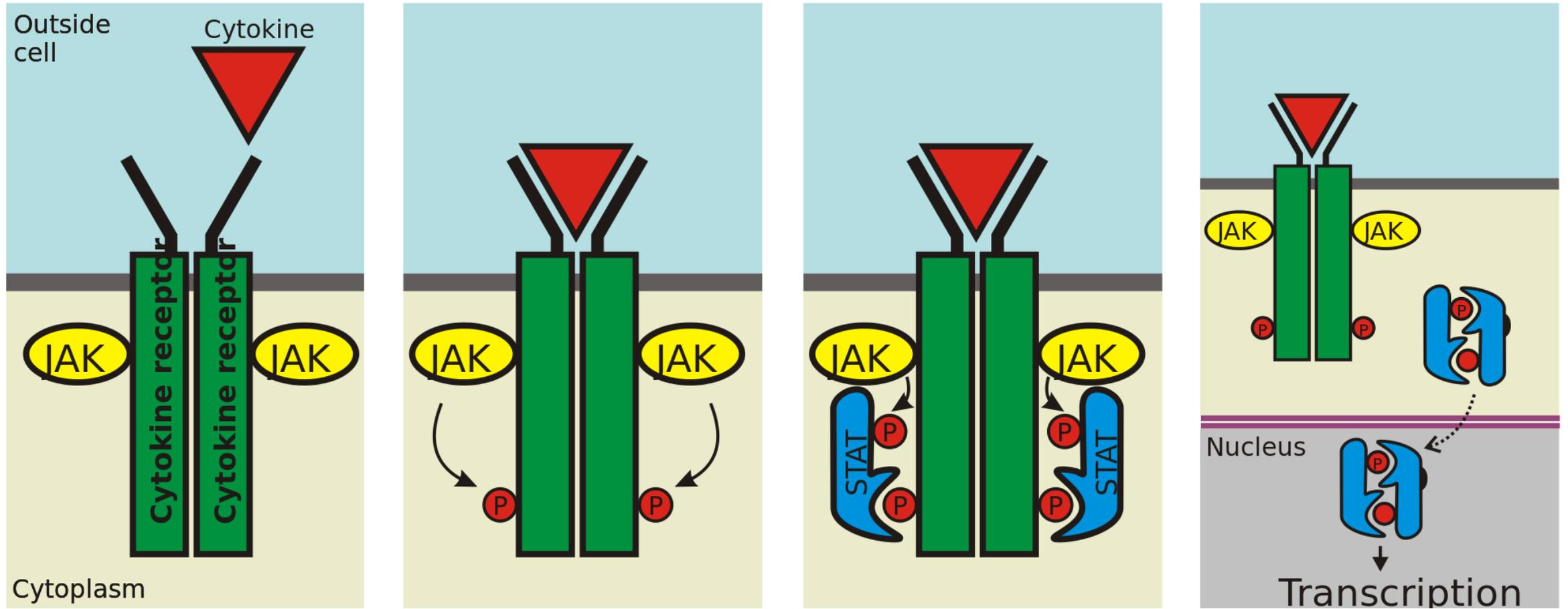
JAK- STAT PATHWAY



Janus Kinases (JAK)

Signal transducers and activators of transcription (STAT)

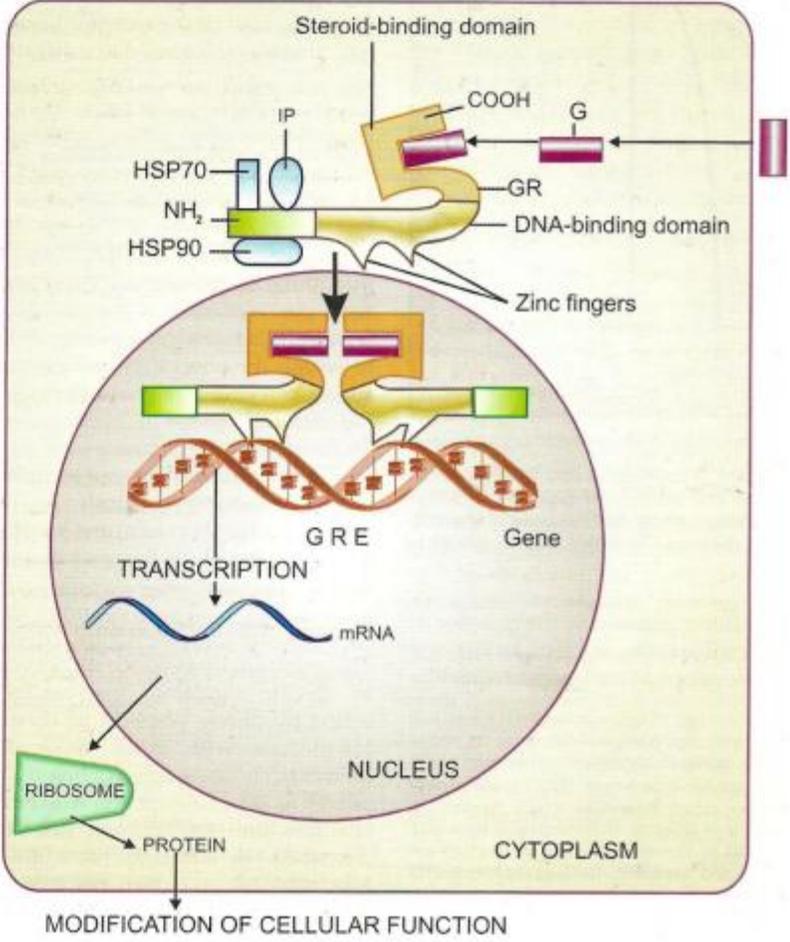
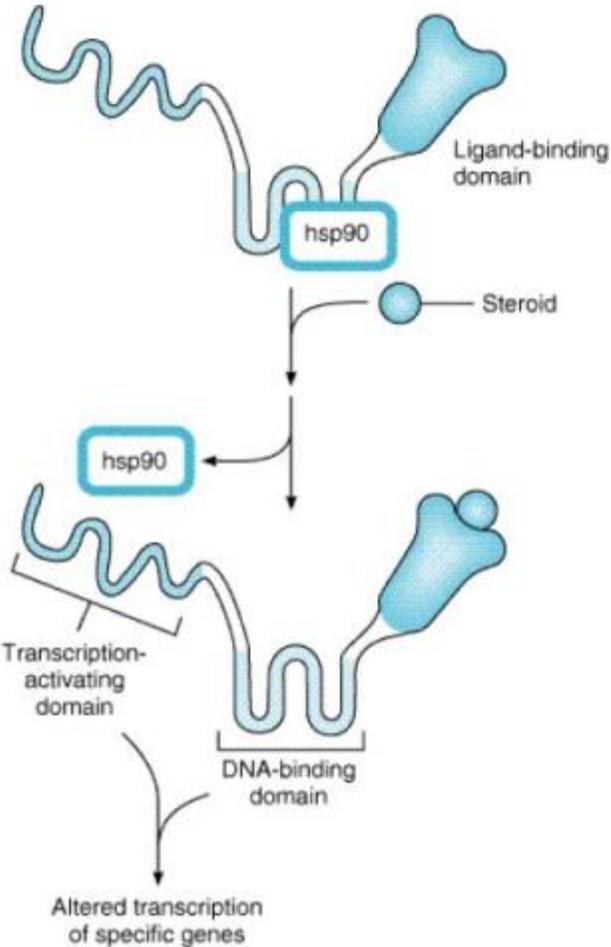
JAK-STAT PATHWAY



Receptor regulating gene expression

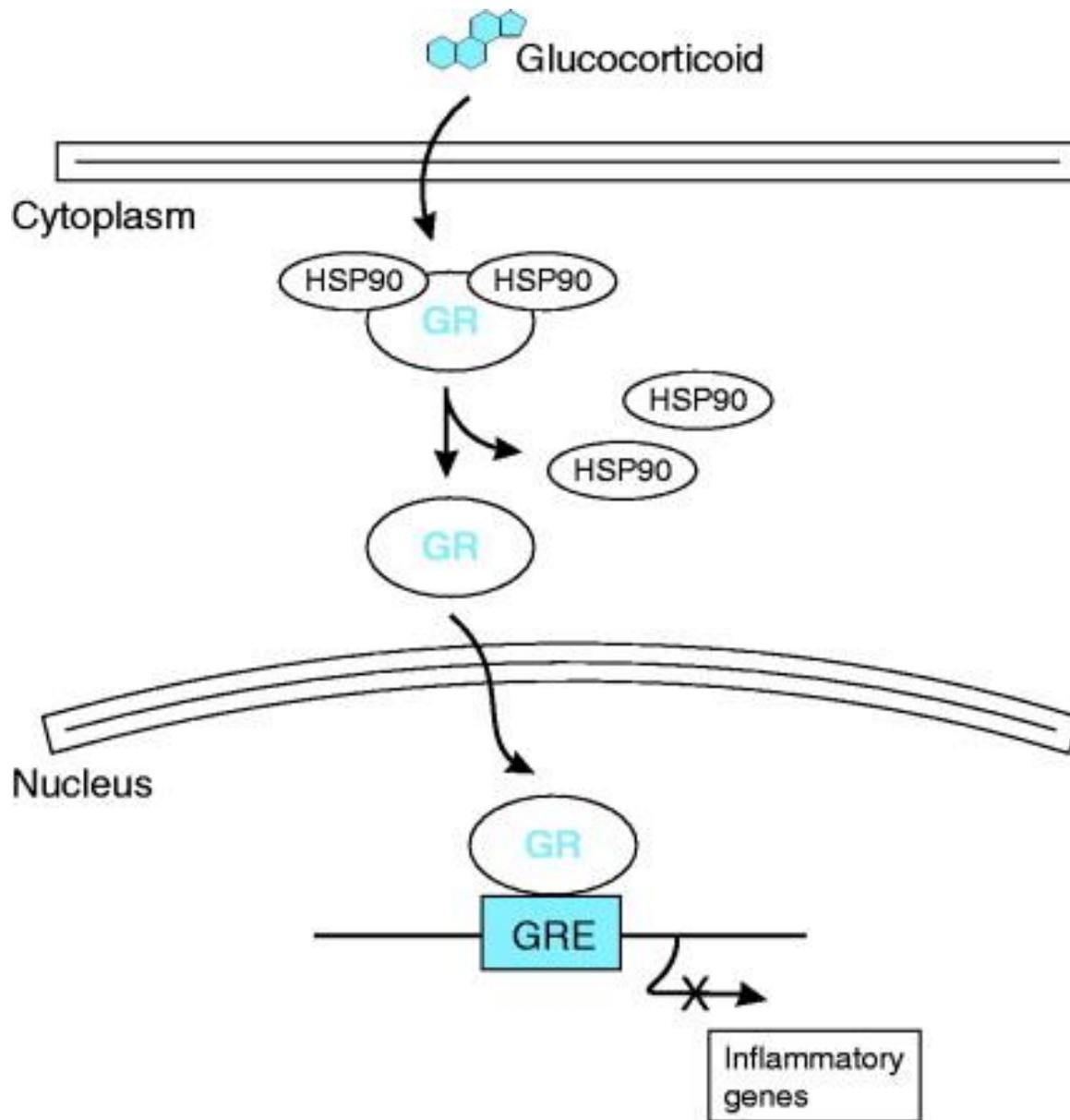
STRUCTURAL FAMILY	FUNCTIONAL FAMILY	PHYSIOLOGICAL LIGANDS	EFFECTORS AND TRANSDUCERS	EXAMPLE DRUGS
Nuclear receptors	Steroid receptors	Estrogen, testosterone	Co-activators	Estrogens, androgens, cortisol
	Thyroid hormone receptors	Thyroid hormone		Thyroid hormone

Nuclear receptor



Either increase or decrease transcriptional activity of the gene

NR is anchored in the cytoplasm by chaperone proteins (e.g., HSP90)



Glucocorticoids promote nuclear import of the glucocorticoid receptor, which results in an upregulation of anti-inflammatory genes and a downregulation of pro-inflammatory cytokines.

