

## **ANNEXIN 1: A MEDIATOR OF GLUCOCORTICOID ACTION AT THE NEUROENDOCRINE-IMMUNE INTERFACE**

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Glucocorticoids (GCs) play an essential role in the maintenance of homeostasis and aberrations in the mechanisms which control their secretion and/or activity are strongly implicated in the pathogenesis of a number of common diseases including depression, hypertension, diabetes/obesity and immune/inflammatory disease. Annexin 1 (ANXA1), a protein mediator of GC action, is a key regulator of GC secretion, acting within the brain and pituitary gland to depress the release of the hormones which normally drive GC production. Its mode of action is unusual as it acts by a juxtacrine/paracrine mechanism and, following secondary processing, appears to interact with formyl peptide receptors (FPRs). Ligands for FPRs include bacterial and viral peptides, lipid mediators of the resolution of inflammation and peptides concerned with the pathogenesis of Alzheimer's disease, suggesting a complex interaction between GCs and inflammatory mediators in the brain and pituitary gland. Early life events (e.g. stress) exert long-term effects on ANXA1 expression and function in adulthood. ANXA1 may thus contribute to the altered disease susceptibility linked to adverse events in perinatal life and to disease pathogenesis in adulthood.

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