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CNS / Psyche-Blood / Immune system / Cells-Acupuncture / Drugs-Electrophysiology and Thermodynamics: The redox potential / charge-,energy transfer is responsible for stress protein or O_2^--synthesis / transport and apoptosis/proliferation.

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The plasma membrane NADPH oxidase is a rather complicated electron transfer system, which resembles probably the most important crossover-, end- and starting point of various signal transduction pathways: Ca^{2+}/Mg^{2+}-sensitive phosphorylation and dephosphorylation (incl. JAK-STAT-g-protein-pathway) of the complex regulates the electron transfer (incl. thiol/disulfid-interchange-cyt/FeS-protein) between mitochondria / plasma and nucleus / ER (NADH/ATP-NADPH/K^+-O_2/O_2^--DNA/IgE-cyt P450). Another control is played for instance by arachidonic acid (delivered by PLA_2). The entire complex is not a permanent entity of the membrane, but is built up during defence conditions: The NADPH oxidase belongs then to enzyme systems like insulinR, nAcChR, adenylate cyclase, mitochondrial K^+ ATPase/ATP-synthase(CV) presenting a universal principle of nature: The connecting logistics between CNS (adrenal cortex) and blood/immune system/cells is played by charge displacement or separation and charge (energy) transfer (induced by the cation, incl.proton and/or anion pressure) and redox potential and may be visualized by the successful treatment of various diseases and psychological disorders with acupuncture/ homeopathy/ relaxation therapy or drugs. We try to connect natural sciences in order to get involved into this logistic for prediction of effective new treatments, which includes the modeling of interfering drugs for instance.

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