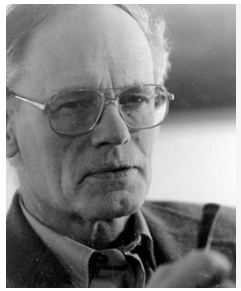
# Cell Membrane Potential Model

According to Robert O. Becker and Bjorn Nordenstrom

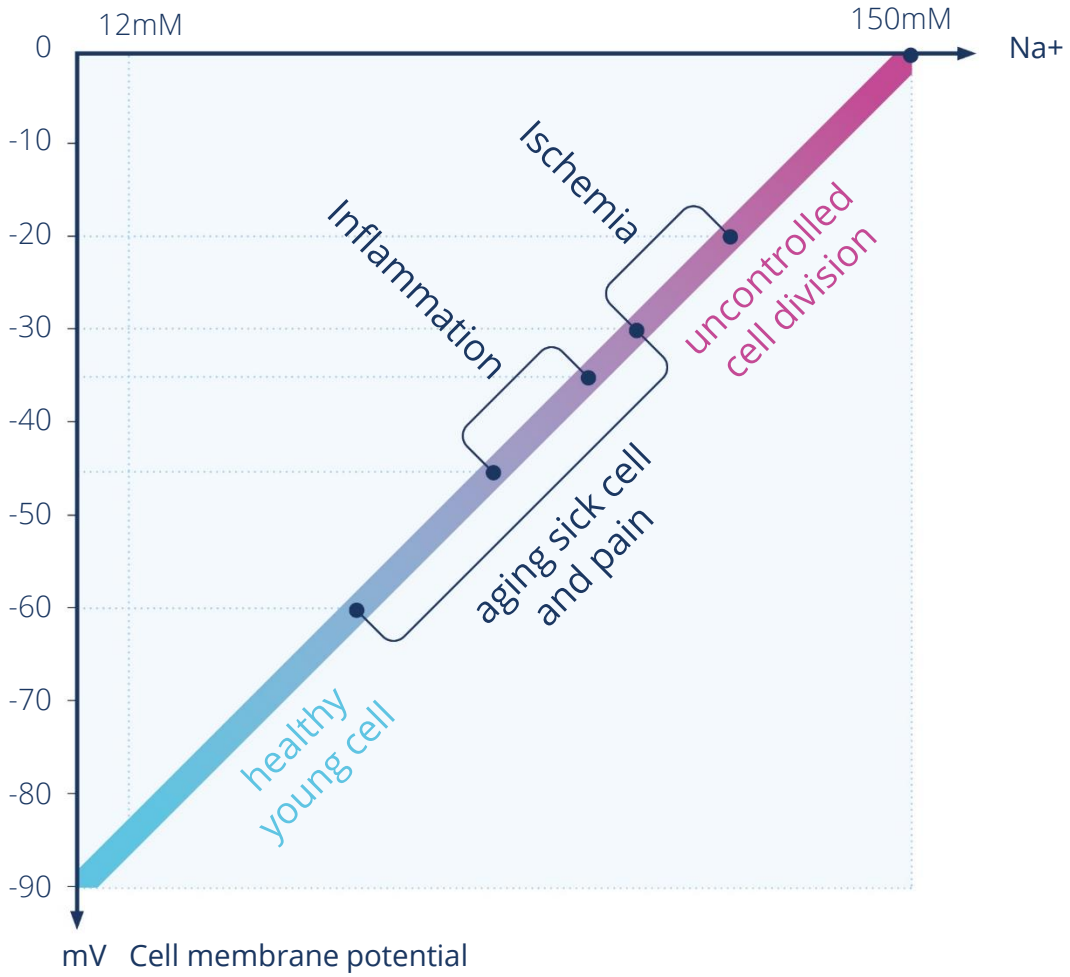


**Prof. Robert O. Becker**

Orthopedic surgeon and expert in electrotherapy, author of the modern electromedical 'Bible', 'The Body Electric' (1985).

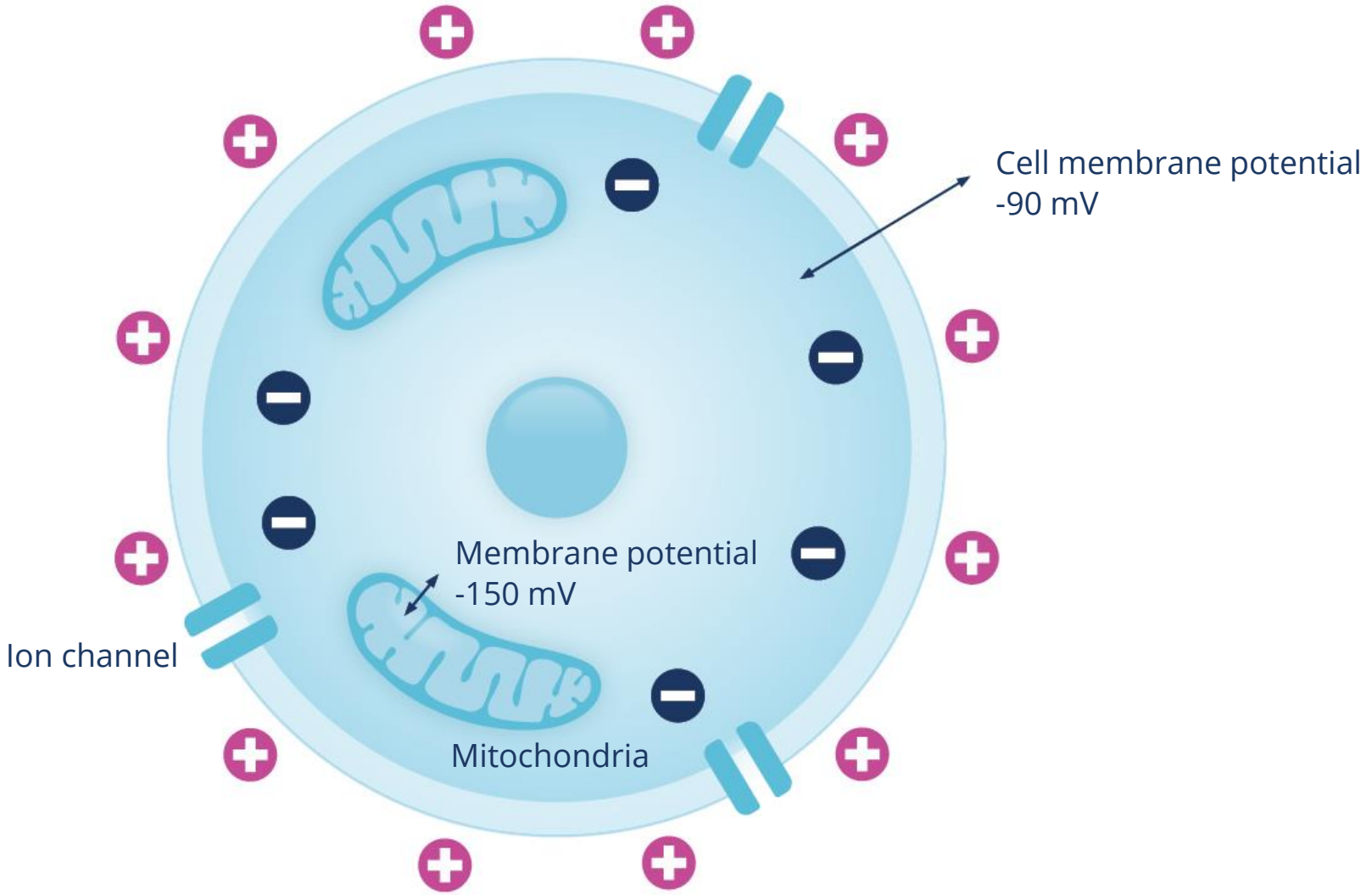
**Prof. Björn Nordenström**

Professor Emeritus of Radiology at the Karolinska Institute in Sweden, former Chairman of the Nobel Prize Committee for Medicine.



# The Cell

The delivery of microcurrent with frequencies has been found to increase membrane potential and ATP production.



# Positive Effects of Microcurrent

according to an animal study by Ngok Cheng et al.*

Increased **ATP production**

up to 500 %

ATP (adenosine triphosphate) stores energy in the cells, similar to gasoline in the gas tank of a car. ATP is produced in the cell by the mitochondria. The mitochondria are the ATP-producing "power plants" in each cell of the body.

Increased **protein synthesis**

up to 70%

Protein synthesis is the process by which proteins are formed to build cells. It means the creation of physical life, following the central blueprint which is stored as DNA in each of our cells.

Increased **amino acid transport**

up to 40%

Amino acids are the building blocks for protein synthesis.

* Clinical Orthopaedics and Related Research Nr. 171, November-December 1982. This animal study refers to the effects of microcurrent and the basic mechanisms on which Healy Frequency programs are based. It did not include any Healy devices.