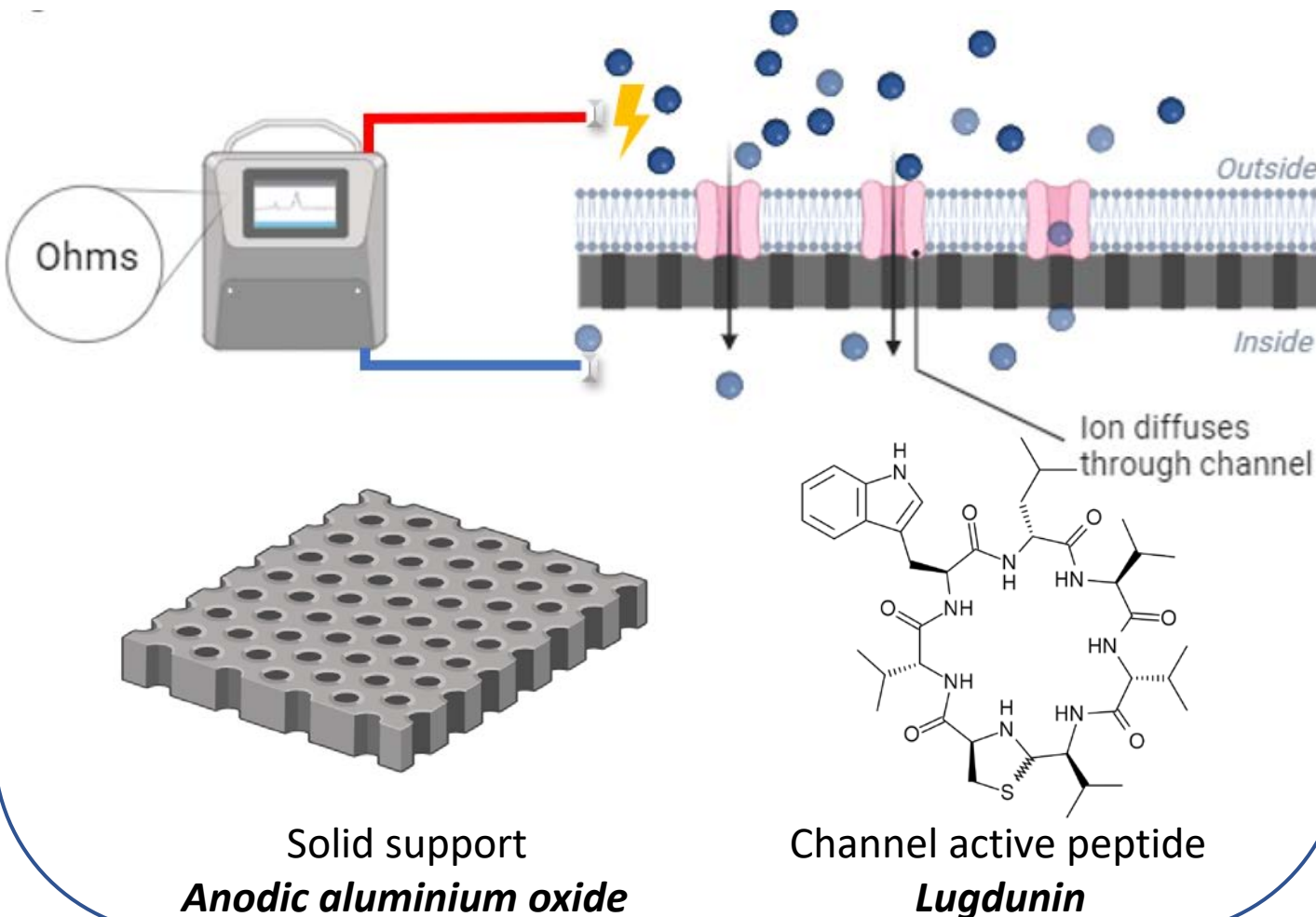


Constructing *membrane biosensors* based on porous alumina substrate

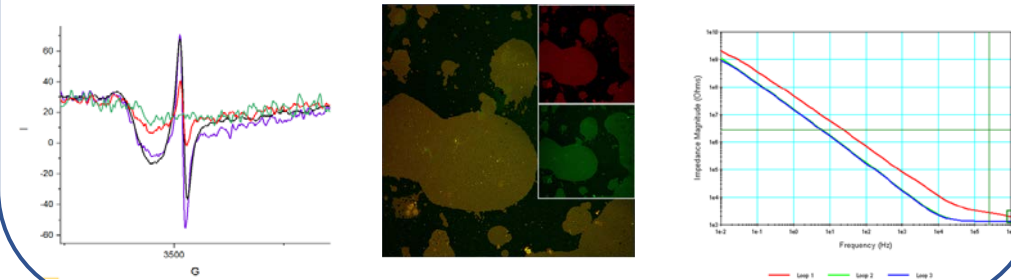
Rational design of membrane biosensors

- GUVs
- Black lipid membranes



Methods:

- Lipid biochemistry
- Fluorescence microscopy (CLSM)
- Physical and electro-chemistry
- EPR spectroscopy
- Impedance spectroscopy



Surface modification:

- Evaporation of SiO_2
- Plasma treatment (Ar and O_2)

