

Expertise in in vitro assays used in vascular biology and inflammation – (a) expertise in cell-based assays to study basic cellular processes (such as migration, proliferation, cell signalling, apoptosis or cytokine production determination, determination of receptor binding profiles, etc.),

(b)

set up and optimization of cellular assays to screen of bioactive molecules,

(c)

integration of molecular biology with protein production groups with focus on the establishment of appropriate models to look into gene expression and to evaluate the bioactivity of new native or mutated proteins involved in signaling pathways, and

(d)

functional evaluation of bioactive molecules, either polypeptides or small molecule modifiers and

(e)

establishment of crucial technology that is not currently available, such as receptor binding and development of stable transfectants.

Expertise in in vivo and ex vivo assays used in vascular biology and inflammation – (a)

expertise in the application and optimization of Intravital Microscopy and use of Myographs,

(b)

development of new capabilities in live animal handling and animal microsurgery skills, and

(c)

evaluation of new proteins, potential pharmaceutical targets, through biological assays.