

THE "SPIRIT" OF VASCULARIZATION

**WITHIN
PLAQUE
BAD!
IPH**

News in Physiological Sci.
June 1999; 14: 121-125
Buschmann I, Schaper W

GOOD!

Angiogenesis

OUTSIDE

PLAQUE

GOOD!

**(HIBERNATING
MYOCARDIUM)**

Substrate: Preexisting capillaries
Promoters: Hif-1 TACGTGCT
Inducers: Ischemia
Result: Increased Capillary density

I N F L A M M A T I O N
Time: Days.

Intraplaque
Macrophages
Ox-LDL induced
VEGF.

**FGF-1 FGF-2
VEGF PDGF
MCP-1 , GM-CSF**

Substrate: Preexisting Arterioles
Promoters: Shear stress responsive element GAGACC
Inducers: Shear stress INFLAM
Result: New Arteries.

I N F L A M M A T I O N
Time: Days to WEEKS/ Mo.

Circulating Cells
Monocytes
Remodeling

Arteriogenesis