Introduction to the Biomaterials-Tissue Interaction SIG

The perfect implant has no side effects and does its job at optimal cost. Since this dream is never completely realized, the significance of side effects must be assessed to determine if they are great enough to exclaim: "Back to the drawing board."

Implant pathology is about determining both direct and side effects of an implant at the tissue level. Without this determination there is no direction to any redesign, no picture of what to change in the "drawing." It is not an idle claim to say that all other SIGs end up at implant pathology. Assessment of implant compatibility is more than histology. It is more than tissue culture. It is the physiology of wound healing, immunology of biofilms, discrimination between necrosis and apoptosis and many other responses during and after tenancy of an implant in its host.

The BTI SIG incessantly brings to the attention of SFB members both techniques for evaluating implants and the challenges they pose to patients. Its members are watchdogs providing a scientific underpinning that ultimately helps device developers deserve patient confidence because their claims are realistic. If you are interested in membership we welcome you!



Van Leeuwenhoek's microscope, 1673



FBR to suture, S.Z. Ali, Johns Hopkins University



Sarcoma in response to metallic intramedullary nail, S.B. Keel, Harvard University