IBI SEMINAR

“Patient-Specific Biomechanical Modeling of Spinal Deformity”

Tuesday – October 2, 2012 – 2:15 p.m.
EPFL – room SV 1717a

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host: Prof. D. Pioletti

Abstract

Spinal deformities are disfiguring conditions which affect the young and otherwise healthy, especially girls. In Australia there are over 50,000 adolescents with idiopathic scoliosis, a deformity for which neither cause nor cure has been discovered. Modern spinal implants apply targeted corrective forces, however excessive force can overload spinal joints and vertebrae leading to tissue damage, implant breakage and loss of correction after surgery. Predicting the limits of correction achievable in a particular patient requires biomechanical models of spinal tissues and implants. This presentation will describe patient-specific biomechanical modelling techniques being developed in the QUT/Mater Hospitals Paediatric Spine Research Group in Brisbane, Australia to optimise deformity correction and avoid implant-relate.

See current IBI seminar calendar at http://ibi.epfl.ch/page-26291.html