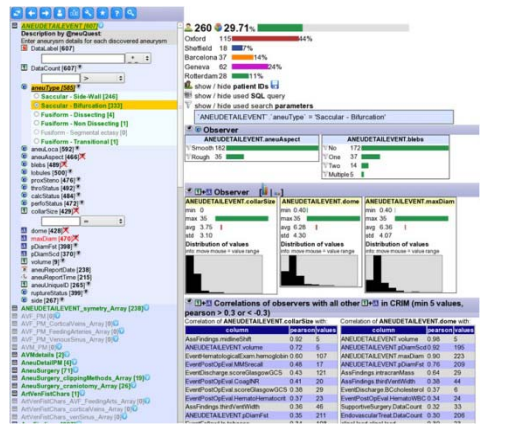
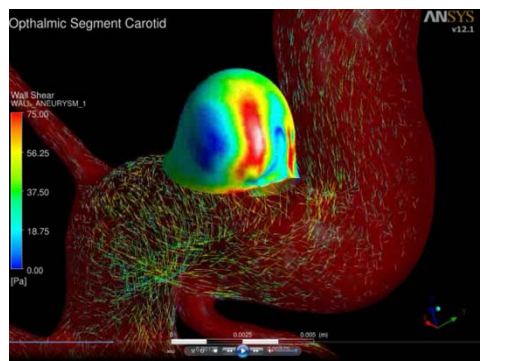


# IST-027703 @neurIST: Improved Healthcare at Lower Cost

Project Demonstration: CCIB Barcelona, EC Booth 801, March 16<sup>th</sup> 2010

The @neurIST project has shown how a clinical workflow can be completely transformed by the use of Information Technology, to yield improved healthcare outcomes at lower cost. The approach is readily transferrable to many other medical conditions, and combines sophisticated data, workflow and knowledge mechanisms with the latest 3D diagnostic simulations, automated research integration and secure international networking. The project's results have implications for healthcare decisions at national level.

Improvements in clinical practice come from two sources: improved techniques and advancing knowledge. @neurIST has delivered multiple outputs in both categories, and in our two presentations you will see these two achievements fully demonstrated.

	<h3>Knowledge Discovery</h3> <p>Medical research produces new results at an astonishing rate. Clinical practice must keep pace, but staying up-to-date by hand is an impossible task. @neurIST has developed automatic search-and-detect systems that continuously identify new research findings and allow the conversion of raw information into knowledge that can improve clinical practice.</p> <p>Repositories of patient data come to life when suitably interrogated, offering fresh insights into disease and treatment. Tools have been built to allow findings from continuing research to be explored for meaning.</p> <p>Knowledge Discovery is possible from both structured and unstructured data sources, across multiple scales (genes, gross anatomy, patient-level and whole populations) and multiple formats (text, images, raw, structured and derived). See the demonstration.</p>
	<h3>Diagnostic Techniques</h3> <p>Patient-specific data has always been the essence of diagnosis, but only now are the sophisticated methods of advanced aeronautical engineering becoming available to medical practice. @neurIST has developed an automated process that reconstructs each patient's anatomy and investigates in remarkable dynamic detail the internal physical behaviour driving the disease process.</p> <p>New predictive measures can be extracted that define the unique characteristics of the patient's condition and play an essential role in building for the clinician a detailed patient-specific risk assessment supporting the treatment decision.</p> <p>The process and its results are truly remarkable to see, and this demonstration will give a thought-provoking and rewarding insight into leading-edge medical technology.</p>

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<http://www.aneurist.org>

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[http://ec.europa.eu/information\\_society/activities/health/research/index\\_en.htm](http://ec.europa.eu/information_society/activities/health/research/index_en.htm)