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NEWS

DSA AND THE SCIENTIFIC REVOLUTION

..."Many of man's greatest inventions have expanded the capabilities of the human body. The computer has enhanced man's ability to see by making the invisible visible. This new vision lies at the heart of digital subtraction angiography (DSA), an imaging technique that produces clean, clear views of flowing blood or its blockage by narrowed vessels. DSA depends on the injection into the vessels of a contrast agent containing iodine that is opaque to x-rays. The shadow this opacity creates allows doctors to see the flow of blood. Frequently DSA is used to look at blood supply to the heart. Before injection of the contrast substance, an x-ray image is made and stored in a computer. After injection a second image is made highlighting the flowing blood as revealed by the substance. The computer then subtracts image one from image two, leaving a sharp picture of blood vessels such as the coronary arteries, the main suppliers of blood to the heart .... The marriage of the computer and medical imaging devices is already bearing fruit. It holds tremendous promise for the future. 'In medicine, as in our society, we have embarked on a scientific revolution unlike any other in man's history,' said Steven Nissen, a cardiologist at U. Kentucky Medical Sch. A growing number of young, dynamic doctors hold PhDs in physics or computer science along with their MDs. And the burgeoning technology of computer graphics is being harnessed to transform the torrents of machine-vision data into meaningful diagnostic displays."

[(Howard Sochurek in *National Geographic* 171(1):2-41, January 1987). Reproduced with permission from Press Digest. *Current Contents*®, No. 12, March 23, 1987. Published by the Institute for Scientific Information®, Philadelphia, PA, USA].

SS BHATNAGAR PRIZE FOR SCIENCE AND TECHNOLOGY FOR 1985–86

The above prize has been awarded to Dr Dilip Kumar Ganguly, Scientist, Head of the Division of Pharmacology and Experimental Therapeutics, Indian Institute of Chemical Biology, Calcutta. The prize has been awarded to Dr Ganguly's work on a chemical model of Parkinson disease. He has recently established that there is a "spinal involvement in the genesis of Parkinson tremor". Dr Ganguly is a founder-fellow of the Indian Academy of Neurosciences and has been the Vice-President of the same Academy.