



## **Biography**

### **Jeff Welser**

Dr. Jeffrey Welser is on assignment from the IBM Corporation to serve as the Director of the Nanoelectronics Research Initiative (NRI), a subsidiary of the Semiconductor Research Corporation (SRC). The NRI supports university-based research on future nanoscale logic devices to replace the CMOS transistor in the 2020 timeframe.

Dr. Welser received his PhD in Electrical Engineering from Stanford University in 1995, and joined IBM's Research Division at the T.J. Watson Research Center. His graduate work was focused on utilizing strained-Si and SiGe materials for FET devices. Since joining IBM, Jeff has worked on a variety of novel devices, including nano-crystal and quantum-dot memories, vertical-FET DRAM, and Si-based optical detectors, and eventually took over managing the Novel Silicon Device group at Watson. He was also working at the time as an adjunct professor at Columbia University, teaching semiconductor device physics. In 2000, Jeff took an assignment in Technology group headquarters, and then joined the Microelectronics division in 2001, as project manager for the high-performance CMOS device design groups. In May 2003, he was named Director of high-performance SOI and BEOL technology development, in addition to his continuing work as the IBM Management Committee Member for the Sony, Toshiba, and AMD development alliances. In late 2003, Jeff returned to the Research division as the Director of Next Generation Technology Components. He worked on the Next Generation Computing project, looking at technology, hardware, and software components for systems in the 2008-2012 timeframe. In mid-2006, Jeff took on his current role for NRI, and is now based at the IBM Almaden Research Center in San Jose, CA.