



The Information Science & Technology Center

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**Colorado State University's
Information Science and Technology Center (ISTeC)
*presents***



Dr. Chris Greer

**Director, National Coordination Office for Networking and Information
Technology Research and Development (NCO/NITRD)
National Science Foundation**

ISTeC Distinguished Lecture

**in conjunction with the
Electrical and Computer Engineering Department and
Computer Science Department Seminar Series**

“Developing a Shared Vision for the Future of Networking and Information Technology Research and Development”

Monday, September 22, 2008

Reception: 10:30 a.m.

Lecture: 11:00 – 12:00 noon

Location: CSU Lory Student Center Room 203

ABSTRACT

The fabric of science is changing, driven by a revolution in digital technologies. These include digital imaging devices for astronomy; microarrays and high-throughput DNA sequencers in genomics; wireless sensor arrays and satellites in geosciences; and powerful computational modeling in meteorology; all of which generate massive data sets that fuel progress. Technologies for high-speed, high-capacity networked connectivity have changed the nature of collaboration and expanded opportunities to participate in science through instant access to rich information resources around the world. As a result of these revolutionary changes in digital technologies, science in the 21st Century will be conducted in a world of five dimensions - three of space, one of time, and one of digital information and communication technologies. The elements of the digital 5th dimension are network connectivity to lower conventional, 4-dimensional barriers to participation and interaction of time and place; computational capacity and capability to expand the possible and extend the conceivable; and information discovery, integration and analysis capabilities to drive innovation. The dimension emerges from the weaving together of these elements into a fabric that is the basis for powerful new tools, resources, and capabilities. The emergence and continuing evolution of this powerful, new dimension is reshaping science, just as it is recasting business, government, education, and many other aspects of human activity worldwide. To lead in the emerging global, digital information society, the nation must fully embrace the digital dimension - expanding access, extending capabilities, and building on the potential of this exciting new environment.

SPEAKER BIOGRAPHY

Dr. Chris Greer is Director of the National Coordination Office (NCO) for the Networking and Information Technology Research and Development (NITRD) program of the National Science Foundation. The NCO/NITRD mission is to formulate and promote Federal information technology research and development to meet national goals. The NCO reports to the Office of Science and Technology Policy within the Executive Office of the President. Dr. Greer is on assignment to the NCO from his position as Senior Advisor for Digital Data in the NSF Office of Cyberinfrastructure. He recently served as Executive Secretary for the Long-lived Digital Data Collections Activities of the National Science Board and is currently Co-Chair of the Interagency Working Group on Digital Data of the National Science and Technology Council's Committee on Science. He is also a member of the Advisory Committee for the National Archives and Records Administration's Electronic Records Archive and a member of the Digital Library Council of the Federal Depository Library Program.

Dr. Greer received his PhD degree in biochemistry from the University of California, Berkeley and did his postdoctoral work at CalTech. He was a member of the faculty at the University of California at Irvine in the Department of Biological Chemistry for approximately 18 years where his research on gene expression pathways was supported by grants from the NSF, NIH and the American Heart Association. During that time, he was founding Executive Officer of the RNA Society, an international professional organization.

To arrange a meeting with the speaker, please contact Dawn Bastian at (970) 491-1849 or dawn.bastian@colostate.edu.

ISTeC (Information Science and Technology Center) is a university-wide organization for promoting, facilitating, and enhancing CSU's research, education, and outreach activities pertaining to the design and innovative application of computer, communication, and information systems. For more information please see ISTeC.ColoState.edu.