



# Biography

Department of the Army



## Dr. Robert E. Davis

Director

**Cold Regions Research and Engineering Laboratory  
U.S. Army Engineer Research and Development Center  
Hanover, New Hampshire**



Dr. Robert E. Davis became the Director of the Cold Regions Research and Engineering Laboratory upon his selection to the Senior Executive Service in September 2006.

At the Cold Regions Research and Engineering Laboratory and also for the Research Division of the Army Geospatial Center, Dr. Davis leads programs in basic and applied science, applied engineering and technology development. These programs focus on a spectrum of science and technology needs, which extends across the principal mission areas of the U.S. Army Engineer Research and Development Center. The Engineer Research and Development Center supports the Department of Defense and other agencies in military and civilian projects. Principal mission areas include military geospatial research and engineering, environmental quality and infrastructure, military engineering, and civil works. Dr. Davis also serves on the Board of Directors for the Engineer Research and Development Center, which encompasses seven laboratories, including the Cold Regions Research and Engineering Laboratory.

Dr. Davis' service covers a wide range of responsibilities in market and business development, human capital, research program oversight and business effectiveness. His research portfolio includes major initiatives in sensing phenomenology, geo-intelligence, terrestrial and lower atmosphere sciences, human terrain, and cold regions science and engineering, a legacy mission area. His initiatives include leading new program development efforts and enhancing partnerships with clients, stakeholders and users of R&D products, which include the Army, other Department of Defense organizations, National Science Foundation, academia and commercial institutions.

Dr. Davis continues to serve on panels and committees of government and academic research organizations, providing input to strategic research goals, particularly as related to areas of the Earth surface sciences. Dr. Davis also participates in special initiatives supporting the United States Strategic Command, the United States Central Command, the Director, Defense Research & Engineering, the Joint Staff, and other Department of Defense organizations. In this capacity, he primarily provides advice related to intelligence collection in complex and challenging environments.

**CAREER CHRONOLOGY:**

- April, 2001 – Sep 2006: Technical Director of Military Programs, Cold Regions Research and Engineering Laboratory, U.S. Army Engineer Research and Development Center, Hanover, NH
- April, 1990 – March, 2001: Research Scientist, Geophysical Sciences Branch, Cold Regions Research and Engineering Laboratory, U.S. Army Engineer Research and Development Center, Hanover, NH

**COLLEGE:**

- PhD, Geography, University of California, Santa Barbara.
- MA, Geography, University of California, Santa Barbara.
- BA, Geology & Geography, University of California, Santa Barbara.

**AWARDS AND HONORS:**

- U.S. Army Engineer Research and Development Center: Award for Outstanding Team Effort (2)
- U.S. Army Research and Development Achievement Award
- U.S. Army Superior Civilian Service Award
- U.S. Marine Corps Mountain Warfare Training Center Outstanding Service Award
- NASA Graduate Trainee Fellowship, NASA Goddard Space Flight Center

**PROFESSIONAL MEMBERSHIPS AND ASSOCIATIONS:**

- American Geophysical Union

**MAJOR PUBLICATIONS:**

Major publications of Dr. Davis include over 50 peer-reviewed journal articles, of which about 25 percent deals with the physics of heat and mass transfer in snow cover. Another 20 percent of Dr. Davis's articles describe techniques and approaches to estimate land surface properties from remote sensing, and about 20 percent more deal directly with the phenomenology of optical, infrared, millimeter-wave and microwave interactions with the Earth surface. About 15 percent of his major publications involve modeling the characteristics of solar radiation, and view, through forest canopy. The rest of Dr. Davis's peer-review contributions concern the fate and disposition of contaminants in snow and the interaction between weather factors and snow avalanches. Dr. Davis has also made contributions to more than 100 symposia and technical reports. Dr. Davis has also written for, and served on the editorial board of, publications concerning military technology, primarily in intelligence and civil military operations.