

## Mission

The Center for Information Technology's (CIT) mission is to provide, coordinate, and manage information technology and to advance computational science. CIT supports NIH's research and management programs with efficient, cost-effective information systems, networking services, and telecommunications services. As part of its mission, the CIT:

- provides leadership for determining NIH's computational and telecommunications needs and oversees development of infrastructure support;
- operates a state-of-the-art regional computer facility responsive to the NIH mission;
- develops NIH information technology policy to implement policy and legislation;
- provides policy and standards leadership within NIH by identifying and communicating NIH information technology issues, problems and solutions;
- establishes and operates the necessary organization and infrastructure to assure security, connectivity, and interoperability across the NIH;
- collaborates on, and provides for, research activities in the computational biosciences and statistics;

- develops, administers, and manages NIH systems, and provides consulting services to the ICs, in support of administrative and business applications;
- serves as a Federal Data Center for administrative, biomedical, and statistical computing;
- provides data processing and high-performance computing facilities, integrated telecommunications data networks, and services to HHS and other Federal agencies.

## Important Events in CIT History

1954 -- A central data processing facility is established by the Office of the Director, NIH, under Dr. Harold Dorn, combining EAM (punched card) equipment and biometric expertise.

1956 -- The biometric facility becomes the Biometrics Branch in the new DRS (Division of Research Services).

May 1956 -- The NIH director establishes a committee on electronic data processing and computers.

1958 -- NIH installs its first electronic digital computer as an experimental device.

March 1960 -- The Surgeon General approves establishment of a Computational and Data Processing Branch in DRS.

October 1961 -- NIH installs its first "second generation" computer.

April 1966 -- The components of the "third generation" computer system are installed.

April 1969 --- NIH research community receives first time-sharing computers.

June 1969 -- Minicomputers designed by the Division of Computer Research and Technology (DCRT) are installed in NIH laboratories.

May 1979 -- An interagency agreement between HEW and GSA establishes the NIH Central Computer Utility as a Federal Data Processing Center.

April 1983 -- The Personal Workstation Project (PWP) is founded to determine how NIH can effectively use personal computers.

1988 -- The Convex Unix-based supercomputer is installed, and the network task group is created.

1990 -- Extensive networking (NIHnet) is installed at NIH to provide connectivity for 60 local area networks.

1992 -- DCRT's Scientific Computing Resource Center walk-in facility for NIH personnel opens.

March 1992 -- DHHS Secretary Sullivan in a letter to Congress commits to creating a new NIH office to improve the management and coordination of NIH's information resources.

June 1992 -- NIH Director approves creation of the Office of Information Resources Management (OIRM) in the Office of the Director to direct and manage NIH information resources management (IRM) program activities.

September 1993 -- The ISSO committee is established to deal with NIH IT security issues.

January 1994 -- DCRT celebrates its 30<sup>th</sup> anniversary.

February 1994 -- DCRT's Help Desk is inaugurated to help customers obtain computer-related information.

October 1994 -- OIRM sponsors the first Internet Conference on legal and policy issues related to the increased use of Internet resources at NIH.

May 1995 -- Internet Expo Day helps NIH staff discover the World Wide Web and its enormous potential to disseminate and exchange information.

June 1995 -- The NIH Director approves a revised charter for NIH IRM Council and increases its role in providing management leadership on NIH-wide Information Technology initiatives.

July 1995 -- OIRM, the National Science Foundation, and World Wide Web (WWW)

Federal Consortium sponsor a Federal Webmaster Workshop on legal, ethical, and security issues related to increased WWW use by federal agencies.

August 1995 -- The first NIH Electronic Store is established to facilitate the efficient acquisition of personal computers, hardware, software, and on-line components by the NIH community.

June 1996 -- The IRM Council establishes the NIH Year 2000 Workgroup (Y2K) to provide the NIH community with leadership and direction on initiatives modifying computer systems and applications to accommodate problems related to a two-digit date field.

June 1996 -- NIH's Computer Center is designated a major DHHS data center.

July 1996 -- The NIH Data Warehouse, which provides a one-stop-shop graphical user interface to the NIH administrative and accounting community, is introduced to the NIH community.

July 1996 -- The Telecommunications Committee is established to provide the IRM Council with advice about crosscutting telecommunication issues affecting a large number of NIH staff. These issues include: telephone features and services, pagers, cellular services, video teleconferencing, remote access, audio conferencing, and

switchboard operator services. Responsibilities for these issues are shared by DCRT and the Telecommunications Branch (TCB) located in NIH's Office of Research Services (ORS).

August 1996 -- The Information Technology Management Reform Act of 1996 (ITMRA, also known as Clinger-Cohen Act) becomes effective. ITMRA assigns overall responsibility for the acquisition and management of government information technology (IT) resources to the Director, Office of Management and Budget (OMB). Additionally, it gives authority to the heads of executive agencies to acquire IT resources and directs agencies to appoint a Chief Information Officer (CIO) to provide advice to each agency on the effective management of IT investments.

August 1996 -- NIH Director appoints interim NIH CIO.

September 1996 -- NIH Director's Leadership Forum on the management of IT at NIH forms IT Central Committee (ITCC) to provide recommendations on improving the management for NIH IT resources.

December 1996 -- Final ITCC report is submitted to the NIH Director. The report recommends appointing a CIO and combining DCRT, OIRM, and TCB into a single organizational structure.

May 1997 -- DCRT sponsors Web Information Day -- "Tools for the Web, the Web as a Tool." Open to all NIH employees, the all-day program features seminars and demos focusing on effective Web use.

July 1997 -- DCRT introduces the NIH Human Resources Information and Benefits System (HRIBS), a Web service that gives employees easy access to their personnel data, including benefits, salary, awards, leave, savings, performance and retirement.

September 1997 -- DCRT completes consolidation of two HHS data centers -- Program Support Center Information Technology Service and the Administration for Children and Families National Computer Center -- into the NIH Computer Center.

September 1997 -- The Arthur Andersen Review of NIH's administrative structure, conducted in response to a request from Congressman John Porter, is completed. The report recommended that the NIH Director implement the ITCC recommendations by appointing a permanent CIO and establishing a CIO organization.

October 1997 -- Vice President Gore awards OIRM staff the National Performance Review "Hammer" Award for the development of an automated security risk assessment tool for networks.

November 1997 -- DCRT inaugurates SILK (Secure Internet-Linked) technology to provide Web access to enterprise data.

February 1998 -- The Center for Information Technology (CIT) is formed. CIT combines the functions of DCRT, OIRM, and TCB.

March 1998 -- Alan S. Graeff is named NIH's first CIO and Director of the newly formed Center for Information Technology.

April 1998 -- CIT's OIRM sponsors an IT Security Conference to provide IT security officers and others with essential security information for moving towards the 21st century.

October 1998: The NIH IT Board of Governors is established. The Board advises the NIH Director and the NIH CIO on NIH-wide IT management and makes recommendations on the IT activities and priorities of the NIH.

May 1999: The Information Technology Management Committee (ITMC) is formed. The Committee develops and communicates recommendations and decisions at the Institute/Center level, provides a forum for building consensus across the NIH, and serves as an umbrella organization to the NIH IT process management and technical committees.

## Biographical Sketch of CIT Chief Information Officer

Alan S. Graeff

Mr. Graeff was named NIH's Chief Information Officer and Director of the newly formed Center for Information Technology on March 6, 1998.

He previously served as chief of the Clinical Center's (CC's) Information Systems Department, where he oversaw a major IT reorganization that introduced a centralized infrastructure based on technical standards, reliable architecture, and high levels of customer support. He created a unified support structure for IT in the CC's diverse environment of clinical research, patient services, and administration.

As chief of the National Institute of Allergy and Infectious Diseases' (NIAID) technical systems section from 1989-1991, Mr. Graeff was responsible for building the institute's first wide-area network, comprising 12 locations across the country and serving 1,400 computer users. He also designed and implemented an NIAID acquisition workflow system that streamlined the institute's acquisition and planning processes.

In earlier positions, he worked as a biologist for the National Cancer Institute's Metabolism Branch and NIAID's Laboratory of Cellular Immunology. Mr. Graeff holds a B.S. in distributed sciences from American University.

### **Office of the Chief Technology Officer (OCTO)**

The Office of the Chief Technology Officer (OCTO) advises the CIT Director on the computational and telecommunications needs of the NIH community and provides analysis and guidance in developing systems supporting NIH-wide IT initiatives. In addition, OCTO evaluates new technologies, provides planning guidance for CIT programs and services, and coordinates IT architectural management for the NIH.

### **Office of the Deputy Chief Information Officer (ODCIO)**

The Office of the Deputy Chief Information Officer (ODCIO) advises the Chief Information Officer (CIO) on the direction and management of significant NIH IT program and policy activities under relevant Federal statutes, regulations and policies. It also develops, implements, manages, and oversees NIH IT activities related to IT legislation, regulations, and NIH and other Federal policies.

ODCIO directs NIH's IT capital planning processes with regard to major IT investments, and provides leadership to NIH Institutes and Centers (ICs) to enhance and strengthen their IT program management so they comply with legislative and policy requirements. The ODCIO serves as the principal NIH liaison to the DHHS, its OPDIVs, and other Federal agencies on IT matters. In addition, ODCIO identifies critical IT issues and analyzes, plans, leads, and manages the implementation of special DHHS or Federal initiatives as they relate to the management of NIH's IT resources. ODCIO also collaborates with NIH managers responsible for IT-related functions.

### **Division of Computational Bioscience (DCB)**

The Division of Computational Bioscience (DCB) coordinates and manages all CIT activities related to the conduct and support of NIH research in computational biosciences and statistics, communicating and collaborating with researchers both within and outside NIH. The Division applies computing technology to research involving molecular structure determination and modeling, protein and DNA sequence analysis, and biomedical imaging. In addition, DCB conducts and supports research in mathematical theory and biophysical instrumentation to explain biological phenomena in terms of chemistry and physics and conducts research and development in computer science and computational engineering. DCB promotes the application of high performance computing to biomedical research, evaluates the overall performance of these programs, and represents CIT to the Federal Program in High Performance Computing and Communication (HPCC) and operates the CIT High Performance Computing Platforms. It also supports NIH's distributed scientific workstation efforts.

### **Division of Network Systems and Telecommunications (DNST)**

The Division of Network Systems and Telecommunications (DNST) directs the engineering, design, implementation, and support of network infrastructure and services for the NIH wide area network (NIHnet) to facilitate the use of scientific, administrative, and other business applications. The Division manages and directs NIH telecommunications systems and develops technical requirements for the NIH

ICs and implements telecommunications programs to meet the needs of the NIH community.

DNST researches, develops, and tests next-generation networking/telecommunications technologies and develops and supports applications using new network technologies, such as telemedicine and video conferencing. It provides consulting, guidance and support to the ICs, helping them to meet their network requirements. To improve the information infrastructure on networking/telecommunications activities, DNST serves as liaison to the NIH ICs and other DHHS components.

DNST serves as the focal point for telecommunications service orders, and develops and disseminates recommended standards, policies, and procedures for the nationwide implementation and management of NIH networking and telecommunications systems. DNST also develops, implements, and supports remote access services to NIHnet, provides technical support for wireless services, and a 24-hour telephone/network support service.

### **Division of Computer System Services (DCSS)**

The Division of Computer System Services (DCSS) plans, implements, operates, and supports centrally owned or administered computing resources for NIH enterprises use, ensuring interoperability among those resources and between them and other computing facilities owned by customer organizations. DCSS promotes awareness

and efficient and effective use of these computing resources by customer personnel through training, presentations, consultations, and documentation.

DCSS investigates new and emerging computing requirements of customer programs. It conducts research and development to identify, evaluate, and adapt new computer architectures and technologies to meet identified customer requirements and to enhance current service offerings. Additionally, where appropriate, DCSS manages and operates departmental computing resources for IC, Office, or Center use.

#### **Division of Enterprise and Custom Applications (DECA)**

The Division of Enterprise and Custom Applications (DECA) supports the NIH enterprise business process through the development and management of both transaction and decision-support environments for administrative and business applications of the NIH, such as procurement, budget, accounting and human resource activities. DECA provides systems analysis, programming, application services to the NIH ICs and other Federal agencies, and database administration and management services to the NIH. DECA also provides the NIH community with World Wide Web development, support services, and consulting services for applications development.

#### **Division of Customer Support (DCS)**

The Division of Customer Support (DCS) provides centralized, integrated computer support services to the NIH computing community. DCS advocates customer needs to CIT management and represents services and policies to CIT's customers. It plays an active and participatory role in supporting desktop computing to the end-user in the areas of software and hardware, including Internet, communications, and access technologies. DCS also coordinates and oversees CIT's Training Program for the benefit of the NIH computing community. In addition to providing a central account establishment and management services for access to CIT systems, DCS also manages an NIH-wide HelpDesk and implements problem tracking systems.

NIH Chief Information Officer

| Name           | Date of Birth | Dates of Office       |
|----------------|---------------|-----------------------|
|                |               | From                  |
| Alan S. Graeff | 2/27/54       | March 1998 to Present |