**Office
of Information
Services**

THE KNOWLEDGE CONTINUUM:
Organizing for Research and Scholarly Communication

Paul Vassallo, Director, Office of Information Services
U.S. Department of Commerce
National Institute of Standards and Technology
November 1999

". . . in research there are no final answers, only insights that allow one to formulate new questions."

Salvador Edward Luria,
Nobel Laureate

The Knowledge Continuum

THE KNOWLEDGE CONTINUUM

RESEARCH ACTIVITY

RESEARCH CONCLUSION

RESEARCH DISSEMINATION

RESEARCH DISCOVERY
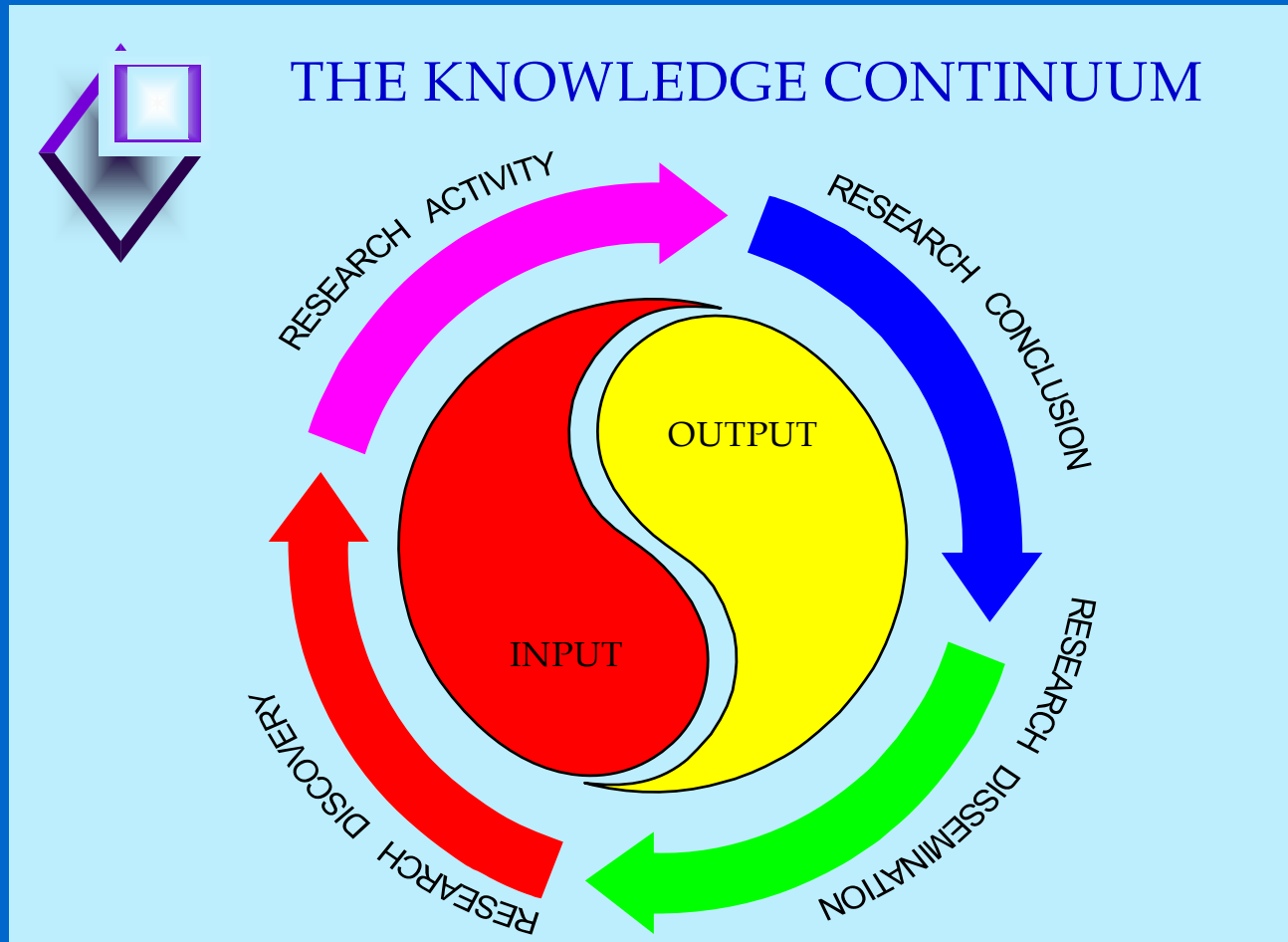
OUTPUT

INPUT

Knowledge Continuum Perspective

- Input and Output are intertwined elements of the same enterprise

- Knowledge Output activities create the Input for new knowledge generation

- The Knowledge Continuum provides a basis for organizational integration

- The Knowledge Continuum organization services both Input and Output needs seamlessly

National Institute of Standards and Technology (NIST)

- **A unit of the U.S. Department of Commerce**

- **Founded in 1901 as the National Bureau of Standards**

- **Mission** (as stated in the Omnibus Trade and Competitiveness Act of 1988)**:**

  – "To enhance the competitiveness of American industry while maintaining its traditional function as the lead national laboratory for providing measurements, calibrations, and quality assurance techniques . . ."

NIST Publications Activities

- **480 publications issued each year**
  - reports on research results and standards
  - catalogs of products and services
  - technical handbooks
- **1,700 journal articles published annually**
  - appear in many scholarly journals
  - appear in the *Journal of Research of the National Institute of Standards and Technology*

NIST Office of Information Services

- NIST's Knowledge Management Organization

NIST Office of Information Services

- OIS Strategic Plan
- Future of OIS driven by Vision of being "Globally recognized as the premier Science and Technology Information Resource"
- OIS Mission Statement
- OIS Staff Performance Plans

NIST Office of Information Services

- **Research Library and Information Program (RLIP)**

- **Electronic Information and Publications Program (EIPP)**

- **NIST Museum and History Program (MHP)**

Research Library and Information Program

- Goal of RLIP is:

- "To enhance the productivity of the NIST research, technical, and administrative staff by providing resources and services which serve their needs for scientific and technical knowledge and to serve as a knowledge resource for the national scientific and technical research communities"

The Challenge to RLIP

- Provide information resources and services proactively vs. reactively
- Deliver services to the research community through an outreach program
- Reconsider the way the library does business
- Provide customized services

How RLIP is Meeting the Challenge

- **NIST Virtual Library**
  - Web-based library resources
  - Reinvents the library to bring as many resources and services as possible to the customer's desktop
  - Online catalog, circulation information, databases, publications, and document delivery
  - Provides desktop access to a broad range of library products and services, including fee-based services such as access to online databases
  - In effect, brings the library to the researcher

The NIST Virtual Library (nvl.nist.gov)

How RLIP is Meeting the Challenge

- **Research Consultants**
  - Take resident library and information expertise to the clientele
  - Provide a continuum of information support from the earliest stages of research discovery and activity to research conclusion and dissemination
- **First Point of Contact**
  - Retrain paraprofessional staff as information technicians
  - Provide initial reference services and respond to directional and brief reference queries

Electronic Information and Publications Program

- Goal of EIPP is

- "To enhance the productivity of NIST research, technical, and administrative staff through resources and services which contribute to the creation and facilitate the publication and dissemination of knowledge products for the NIST and national scientific and technical communities"

The Challenge to EIPP

- **Transform into an integrated information dissemination program**
- **Support all phases of the Knowledge Continuum**
- **Enhance and expand services for both print and electronic publications**

# How EIPP is Rising to the Challenge

- Broad information technology support for the NVL, NIST publications database, and knowledge dissemination activities, including print and electronic publications

- Publish the NIST *Technicalendar* (announcements of seminars and events) and the *Journal of Research of the National Institute of Standards and Technology*

- Provide technical writing and editorial support to the NIST research and technical community

NIST Museum and History Program

- Goal of the Museum and History Program is:

- "To maintain the institutional memory of NIST and to disseminate information about NIST programs through collecting, preserving, organizing and exhibiting archival materials and artifacts, and recording achievements of NIST scientific and technical staff"

NIST Virtual Museum (museum.nist.gov)
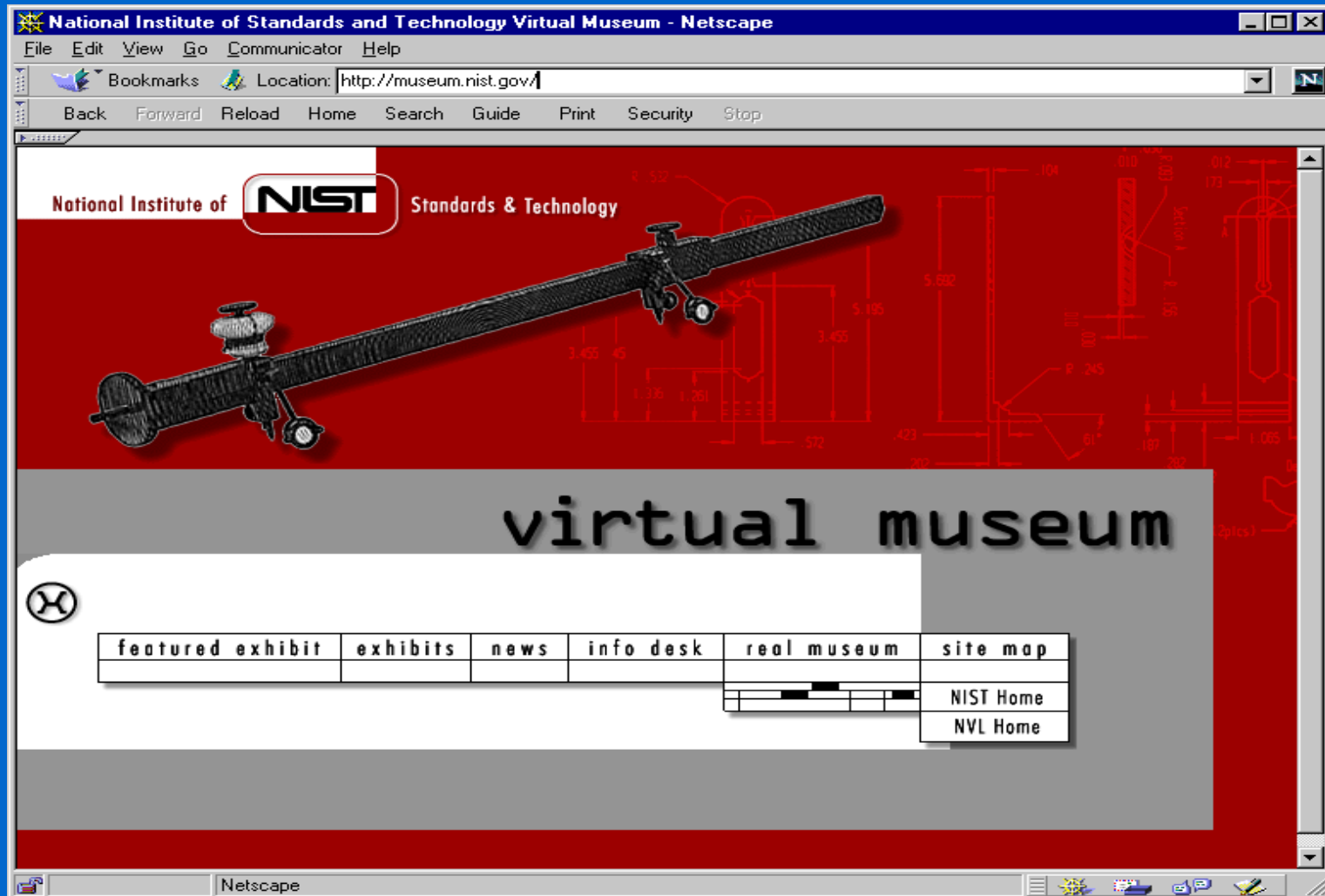
Re-creation of OIS Around the Knowledge Continuum

- Built on existing organizational structure
- Overcame history of lack of cohesiveness
- Underwent major renovation to connect, re-envision, and integrate its various program components
- Organization recreated itself from within, with full staff participation and support

Contact Information

- **Paul Vassallo, Director**
  NIST Office of Information Services
  100 Bureau Drive, Stop 2500
  Gaithersburg, MD 20899

- email: paul.vassallo@nist.gov

- NIST Virtual Library: http://nvl.nist.gov

- NIST Virtual Museum: http://museum.nist.gov

- NIST Journal of Research: http://www.nist.gov/jres