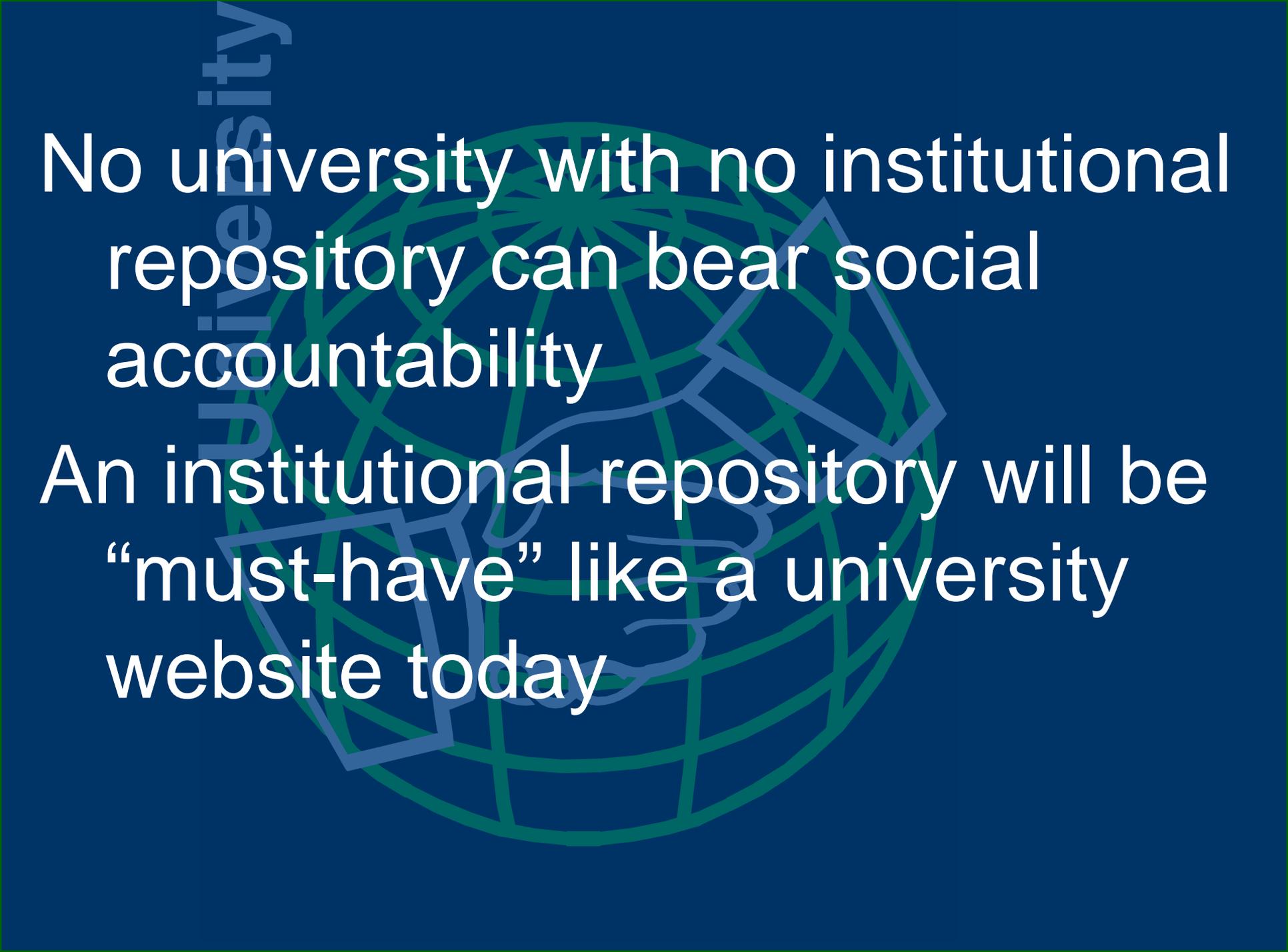# Institutional Repository in Japan

"Standing on the Shoulders of Digital Giants"

International Symposium on Institutional Repositories, e-Science and the Future of Scholarly Communication

Session 3: The Challenge of Digital Resources for Higher Education

Yoshito Itoh
(Director of the Nagoya Univ. Library)

No university with no institutional repository can bear social accountability

An institutional repository will be "must-have" like a university website today

Outline

1. The present of institutional repositories in Japan
   - Governmental policy on scholarly information infrastructure
   - Activities of university libraries
   - Cyberscience infrastructure
2. Current situation of NAGOYA Repository
   - Place within Nagoya University
   - Collaboration with in-campus organizations
   - Marketing activities and problems
   - Researcher Community
   - Interuniversity collaboration

Mar 2002

Digital research infrastructure WS, Information science and technology panel,

Committee of research plan and evaluation, Science Council MEXT

On enhancement of infrastructure for scholarly information (Summary)

Improvement of dissemination of scholarly information functionality of universities

Urgent need for mechanism of systematically dissemination scholarly information with a view to directly get university's research results to the population

Policies for scholarly information infrastructure

Mar 2002 → **Mar 2006**

Scholarly information infrastructure WG
Research environmental panel,
Committee of science, Science Council MEXT

Future developments for scholarly information infrastructure (Report)

Promotion of institutional repositories and scholarly dissemination from universities

Universities as the most resourceful research institutions must put stress on active dissemination of their research results in respect of both enhancing research and education activities and improving scholarly communication and contribution to society

Policies for scholarly information infrastructure　3

Mar 2002 **Mar 2006**

Scholarly information infrastructure WG
Research environmental panel,
Committee of Science, Science Council MEXT

Future developments for scholarly communication（4）Approaches to open access

Promote institutional repositories in research oriented institutions as new means of scholarly communication shall be encouraged in collaboration with scholarly societies in view of strengthening not only better scholarly dissemination but improved institutional repository

Governmental policy on scholarly information infrastructure　4

Mar 2002　　**Mar 2006**　　　March 28 2006 Cabinet approval

Science and Technology Basic Plan, 3rd Term

Improvement of research information Infrastructure

Encourage digital archiving of scholarly journals for disseminating of research information as assets of the country.

Disirably, articles published for the purpose of making research from public funding public must be available on line for free after a certain embargo period.

Activities of university libraries 1

◆ New trends of digital libraries

  ◆ interface among information sources and users with a high additional value

  WG of committee on advanced information libraries, JANUL (May 2003)

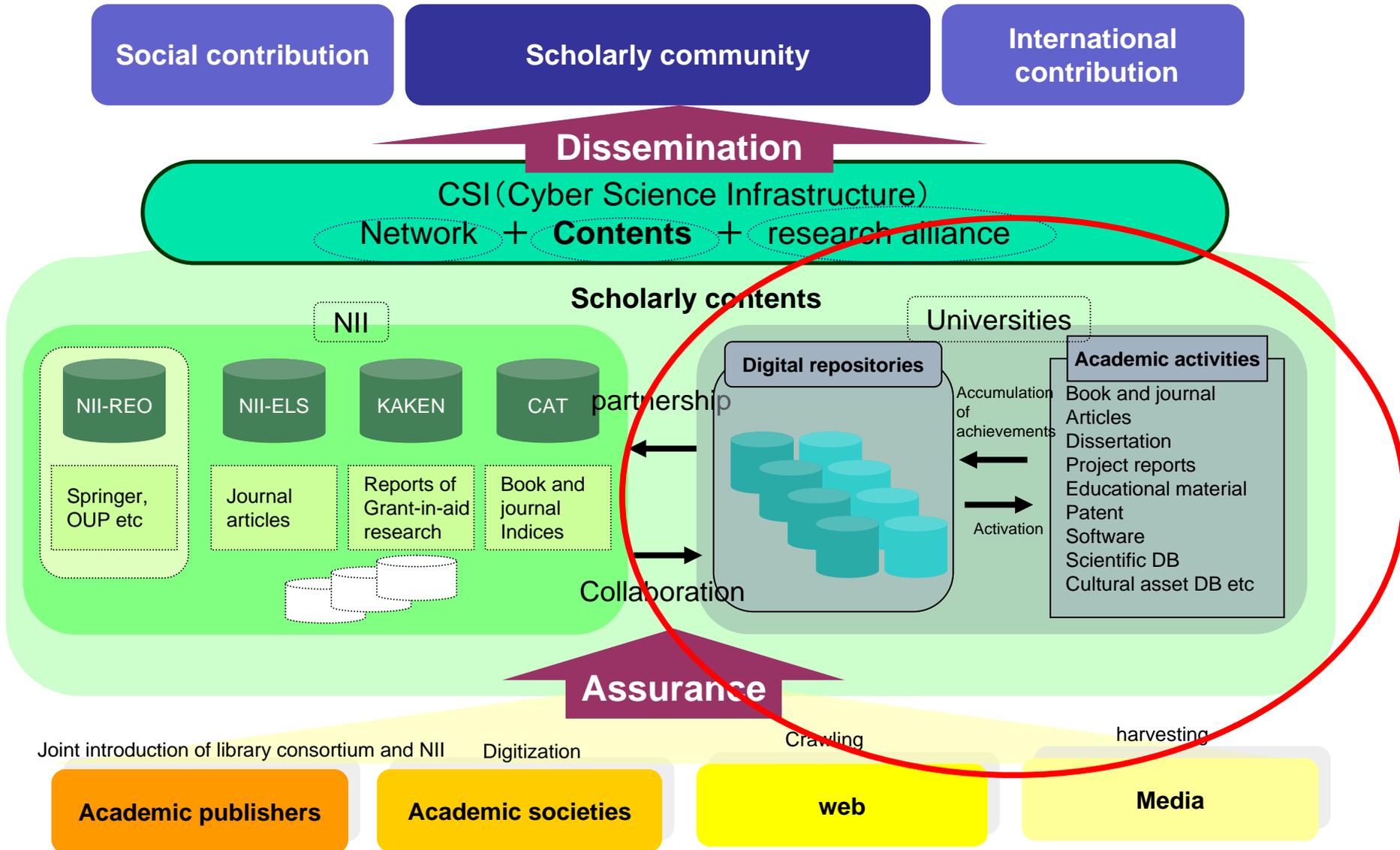 ◆ Enhancement of dissemination of in-campus information via institutional repositories

    ◆ Institutional repositories are to be implemented mainly in university libraries in order to strength the information dissemination function of universities

Activities of university libraries 2

◆ **An implementation of institutional repository software**

　　◆ June 2004-March 2005 (NII)

　　◆ Purpose
　　Accumulate experiences on implementation and operation of IR via research on existing institutional repositories and experimental operation of IR software

　　◆ 6 Partners
　　Hokkaido University, Chiba University, Tokyo University, Tokyo Gakugei University, Nagoya University, and Kyushu University

Next generation content infrastructure

Social contribution

Scholarly community

International contribution

Dissemination

CSI（Cyber Science Infrastructure）

Network ＋ **Contents** ＋ research alliance

Scholarly contents

NII

Universities

Digital repositories

Academic activities

NII-REO

NII-ELS

KAKEN

CAT

partnership

Springer, OUP etc

Journal articles

Reports of Grant-in-aid research

Book and journal Indices

Accumulation of achievements

Book and journal
Articles
Dissertation
Project reports
Educational material
Patent
Software
Scientific DB
Cultural asset DB etc

Activation

Collaboration

Assurance

Joint introduction of library consortium and NII

Digitization

Crawling

harvesting

Academic publishers

Academic societies

web

Media

Commissioned project 2005

◆ Partners selected on the basis of past achievements and concrete planning concerning institutional repositories

◆ Partners (19 universities)

  ◆ Hokkaido, Tohoku, Tsukuba, Chiba, Tokyo, TIT, Tokyo Gakugei, Kanazawa, Nagoya, Kyoto, Osaka, okayama, Hiroshima, Yamaguchi, Kyushu, Kumamoto, Nagasaki, Waseda, Keio

Project extended(2006)

- ◆ Basic concepts
  - ◆ Two goals
    - ◆ Nationwide promotion of institutional repositories
    - ◆ Innovative research and development
- ◆ Two areas of operation
  - ◆ Area 1(Implementation and operation of institutional repositories)
  - ◆ Area 2(Innovative research and development)
- ◆ Result of selection process
  - ◆ 57 universities are accepted
  - ◆ 22 R&D projects approved

Repositories in Japan

◆ 23 repositories are working (as of December 12)

   ◆ http://www.nii.ac.jp/irp/info/list.html

   ◆ Hokkaido, Tsukuba, Tokyo, Tokyo Gakugei, Chiba, Nagoya, Mie, Kanazawa, Kyoto, Osaka, Kobe, Okayama, Hiroshima, Yamaguchi, Kyushu, Nagasaki, Kumamoto, Keio, Waseda, Kanto Gakuin, Ritsumeikan APU, Okinawa Kokusai, JETRO

Activities in Nagoya University

Current situation of NAGOYA Repository

◆ Contents

Journal articles	388	Books	9
Theses and dissertations	317	Conference materials	52
Bulletin articles	3,477	Learning materials	49
Special collections	29,889	Web resources	1,937

As of Dec 7 2006

Usage: NAGOYA Repository

◆ Visits

(10/1/2006-11/30/2006)
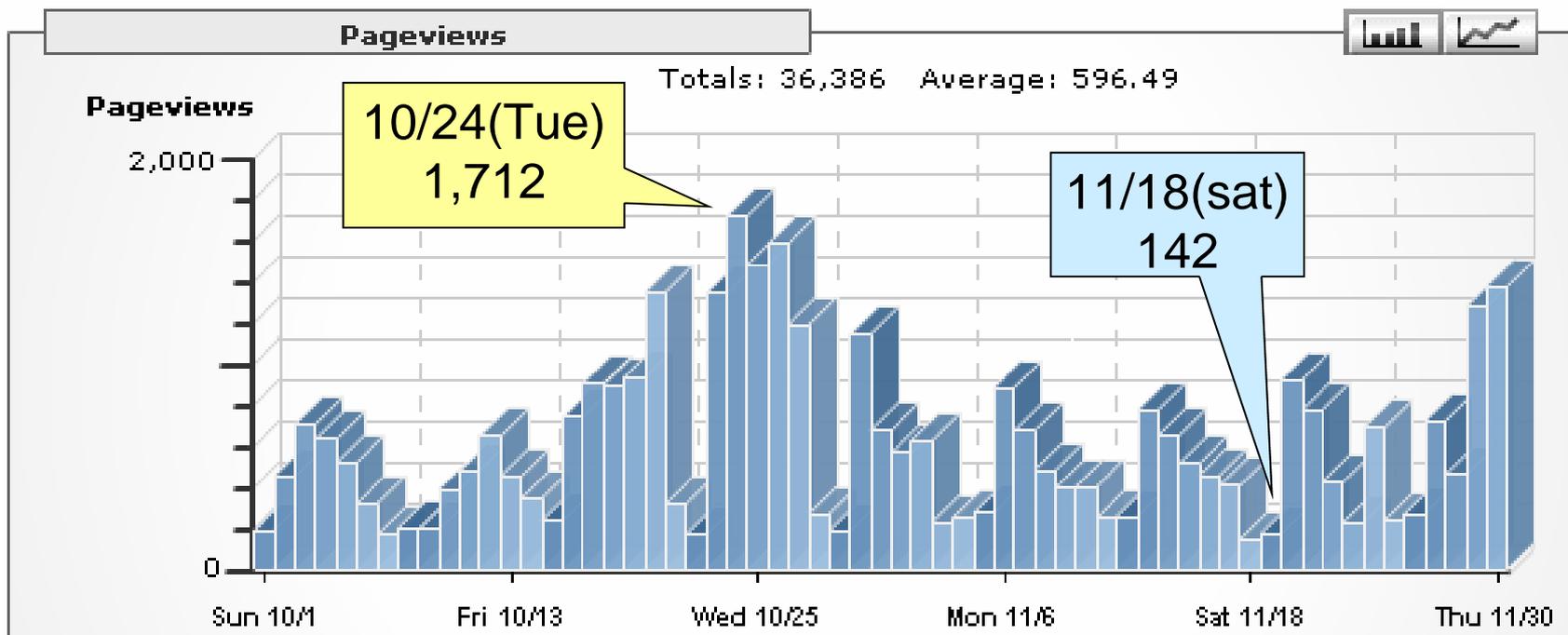
Average 161/day

max：294 min：75
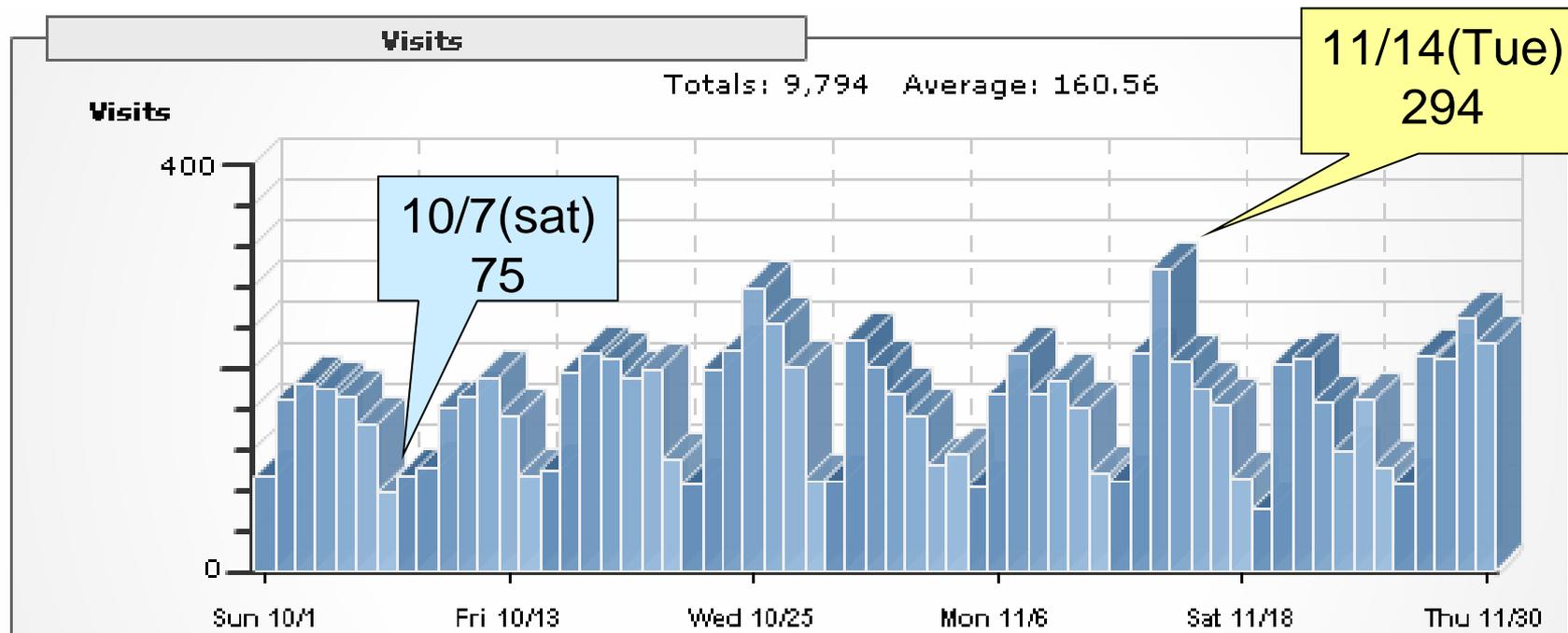
Usage: NAGOYA Repository

◆ Page views

(10/1/2006-11/30/2006)

Average 596/day

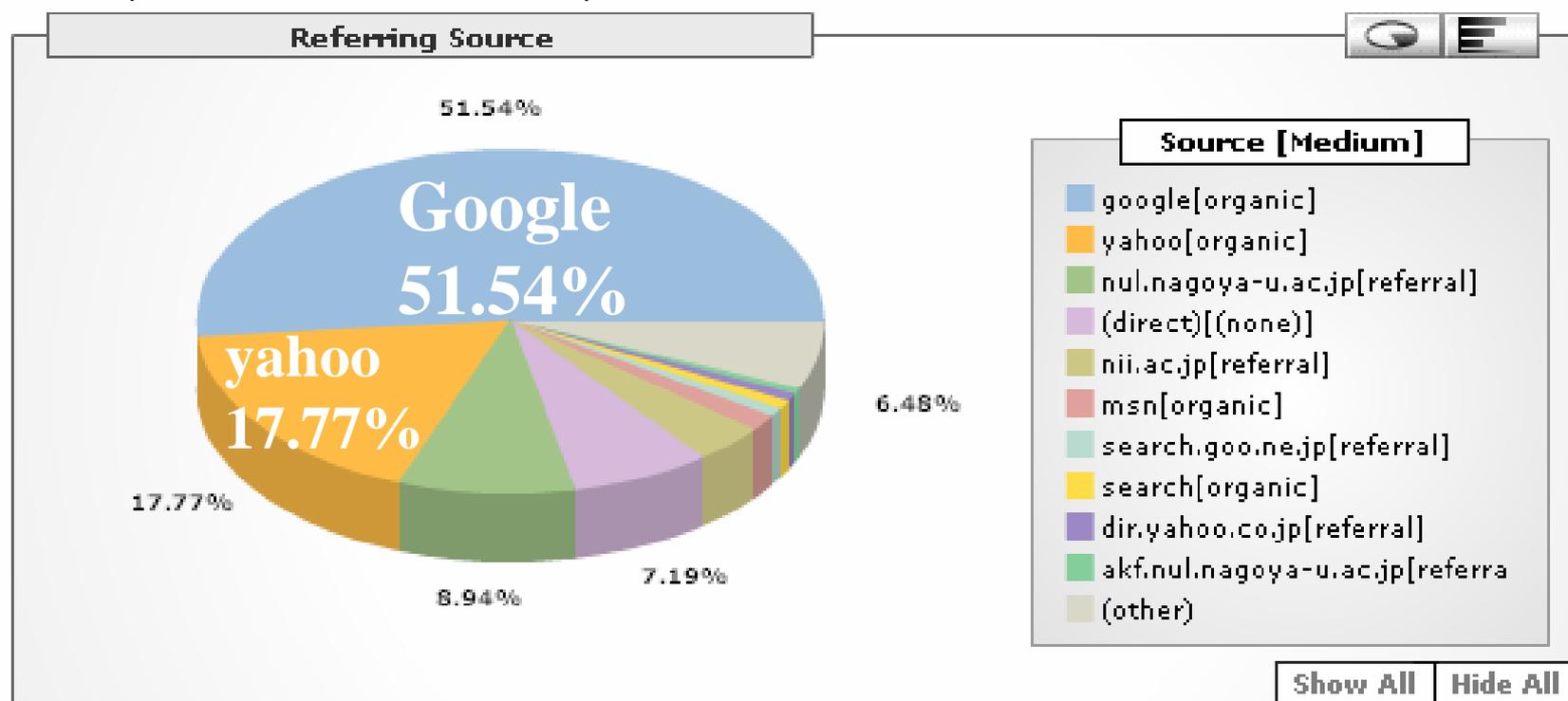**max：1,712　min：142**

Usage: NAGOYA Repository

◆ Geo Map Overlay **Access from worldwide**

Geo Map Overlay
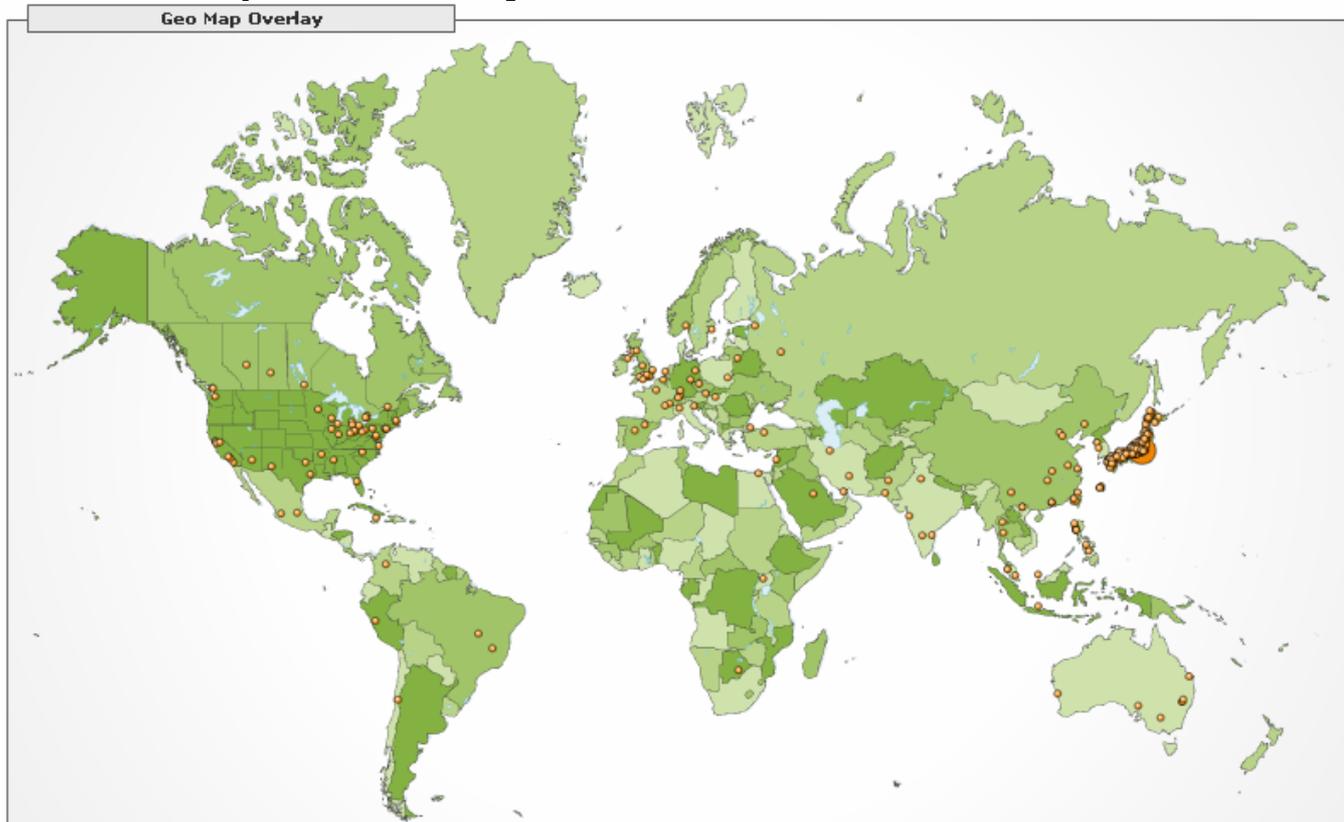
Usage: NAGOYA Repository

◆ Referring source

(10/1/2006-11/30/2006)

70% from Google or Yahoo

Usage: NAGOYA Repository

Total 113,619

◆ # of downloads (Feb-Nov 2006)

	Feb	Mar	Apr	May	June	July	Aug	Sep	Oct	Nov	Total
Journal articles	82	150	269	421	416	524	838	806	1,224	2,363	7,093
Theses	3	97	143	430	3,583	4,838	3,387	3,838	5,148	7,532	28,999
Bulletin articles	147	1,496	5,196	8,638	9,985	5,586	4,782	6,683	7,039	12,422	61,974
Learning materials	9	94	174	646	1,266	1,934	1,683	1,512	1,867	3,071	12,256
Misc.	58	96	159	295	333	277	407	409	481	782	3,297
Total	299	1,933	5,941	10,430	15,583	13,159	11,097	13,248	15,759	26,170	**113,619**

Usage: NAGOYA Repository

◆ # of downloads

(Feb-Nov 2006)

Nov 2006
26,170

Legend:
- Misc.
- Learning material
- Bulletin articles
- Thesis
- Journal articles
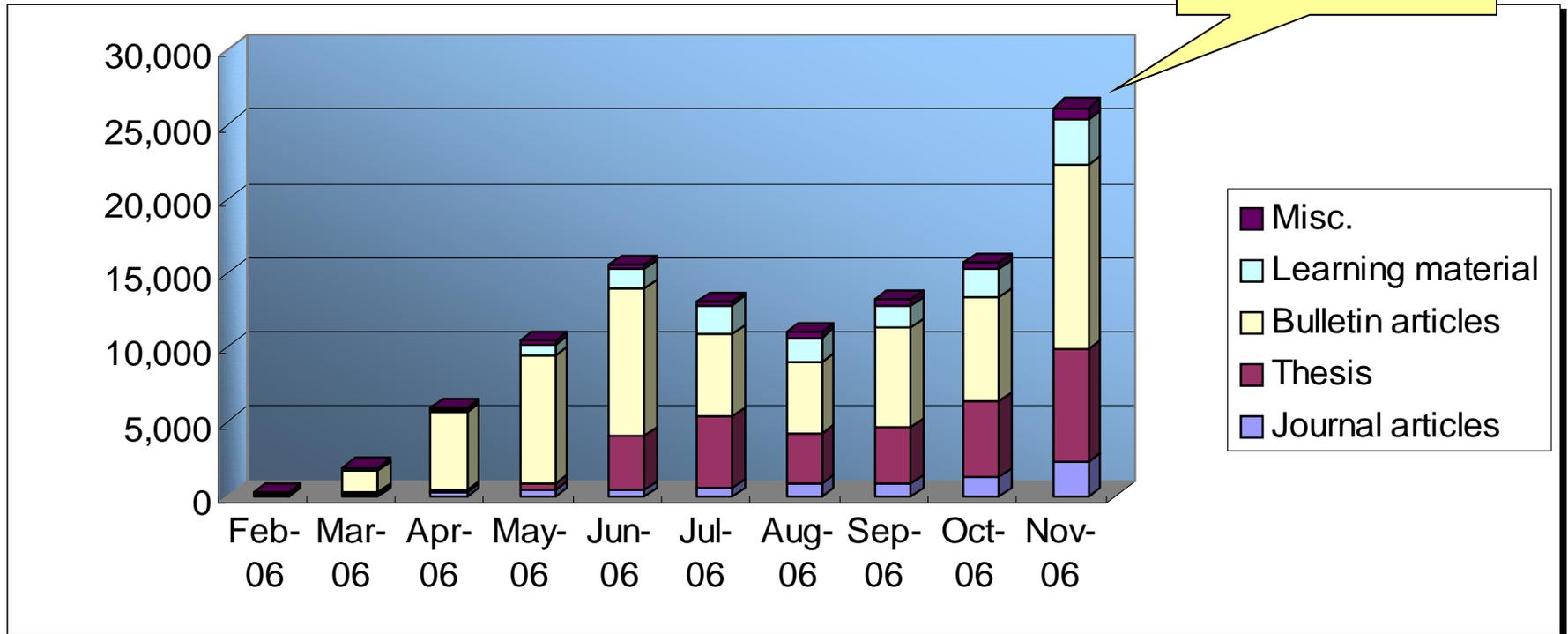
Usage: NAGOYA Repository

◆ summary

　◆ 160 person, 600 page views / day

　◆ 3.8pages/person on average

　◆ Southeast Asia, north America, and Europe as well as Japan

　◆ More than 70% come via search engines (Google ／ Yahoo!)

　◆ More than 10K downloads a month

Top-down

Place within Nagoya University

Open to public on Feb 28, 2006

President Hirano of Nagoya University,
greeting in symposium (Mar 9, 2006)

Place within Nagoya University

◆ President's greetings, Symposium

  ◆ Institutional repository at Nagoya University is a university-wide activity to digitally accumulate, preserve, and disseminate scholarly outputs

  ◆ For content enhancement, not only collaboration of all departments with the university library, but more importantly, willingness of researchers to make their research outputs publicly accessible
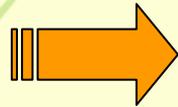
Place within Nagoya University

University-wide operation

◆ University-wide

　　＝necessary for perpetual stewardship

　◆ Presidential briefing 2005/11/29

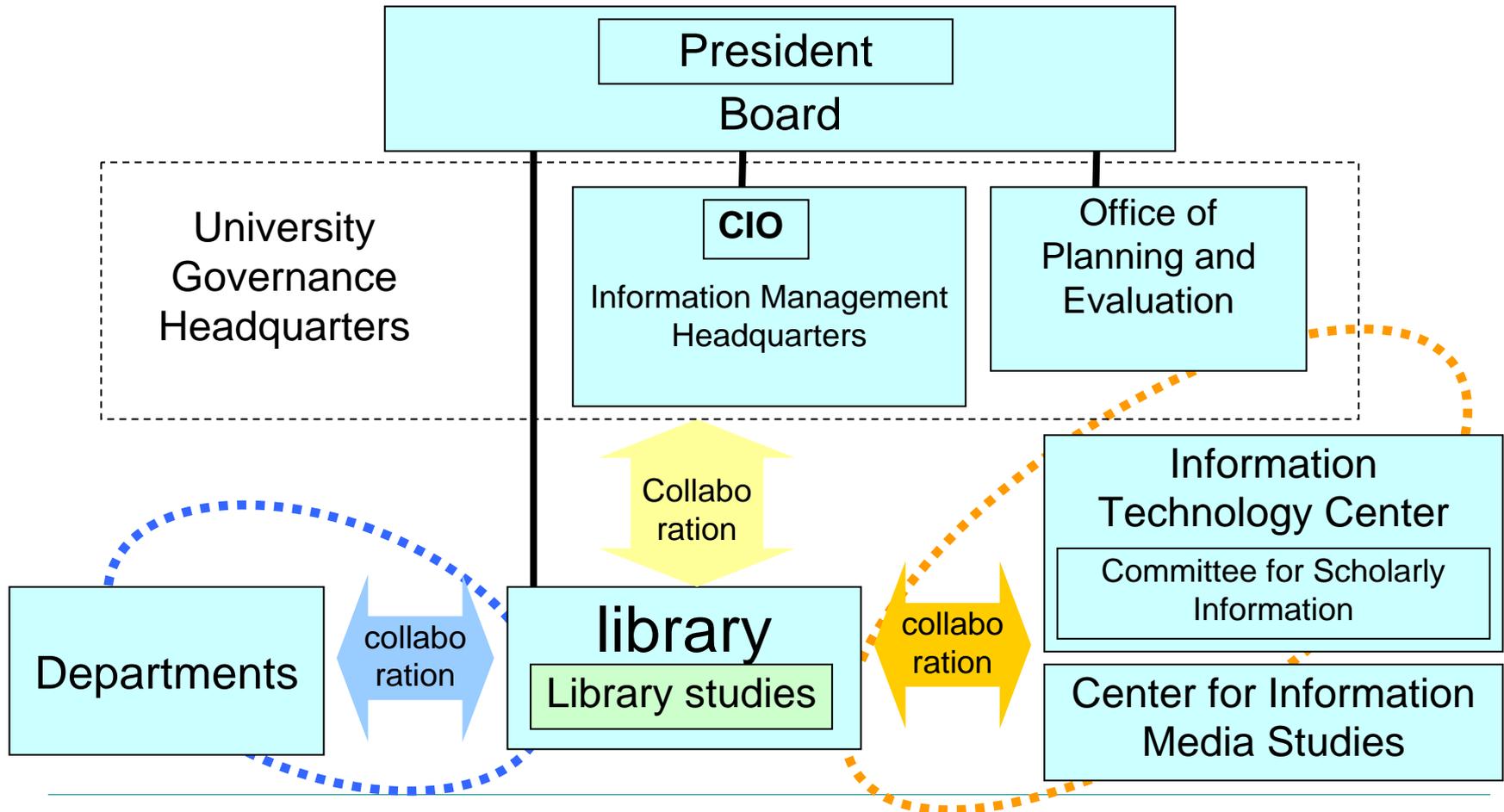　◆ Board briefing 2005/12/20

Significance for university

- **Emphasize the strength of Nagoya U**
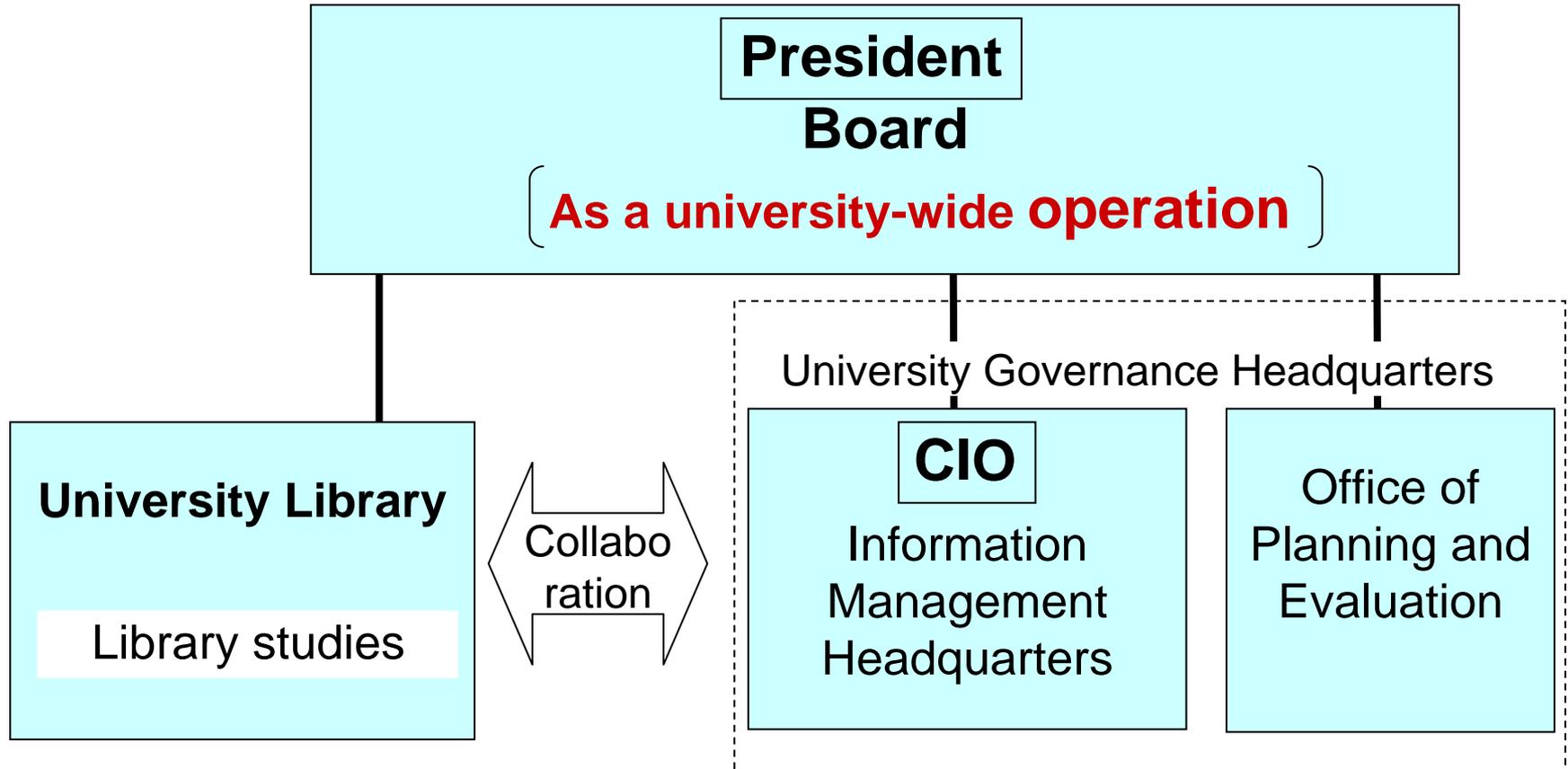 - **Social Accountability**

→ University-wide operation

NAGOYA Repository

Place within Nagoya University (a big picture)

President Board

University Governance Headquarters

CIO — Information Management Headquarters

Office of Planning and Evaluation

Collaboration

Information Technology Center

Committee for Scholarly Information

Departments — collaboration — library — Library studies — collaboration — Center for Information Media Studies

Place within University (Executive level)

President

Board

As a university-wide operation

University Governance Headquarters

University Library

Library studies

Collaboration

CIO

Information Management Headquarters

Office of Planning and Evaluation

Collaboration with in-campus organizations

Researcher Community

Contents Building

Departments
Schools
Graduate Schools
Research Institutes

University Library

NAGOYA Repository
Academic Knowledge Factory
Planning & Operation

collaboration

Library Studies

Eco-collection Database Operation

Information Technology Center

Committee for Scholarly Information

・PLUM
・Authentication system

Research & Development

Center for Information Media Studies

Open Course Ware Operation

Collaboration with in-campus organizations

◆ University Library Studies

   =System development & Support

   ◆ Eco-Collection database

   ◆ AKF: Academic Knowledge Factory

Collaboration with in-campus organizations

◆ Information Technology Center
    =System development & support

    ◆ PLUM

    ◆ Nagoya Univ. ID system (Authentication)

Collaboration with in-campus organizations

◆ Center for Information Media Studies
   =Research and development

◆ Nagoya University Open Course Ware
   LOM＝Learning　Object　Metadata
   NIME（National Institute of Multimedia
      Education）LOM

34

Collaboration with in-campus organizations

◆ The Office of Planning and Evaluation
   Nagoya University Profiles of Researchers
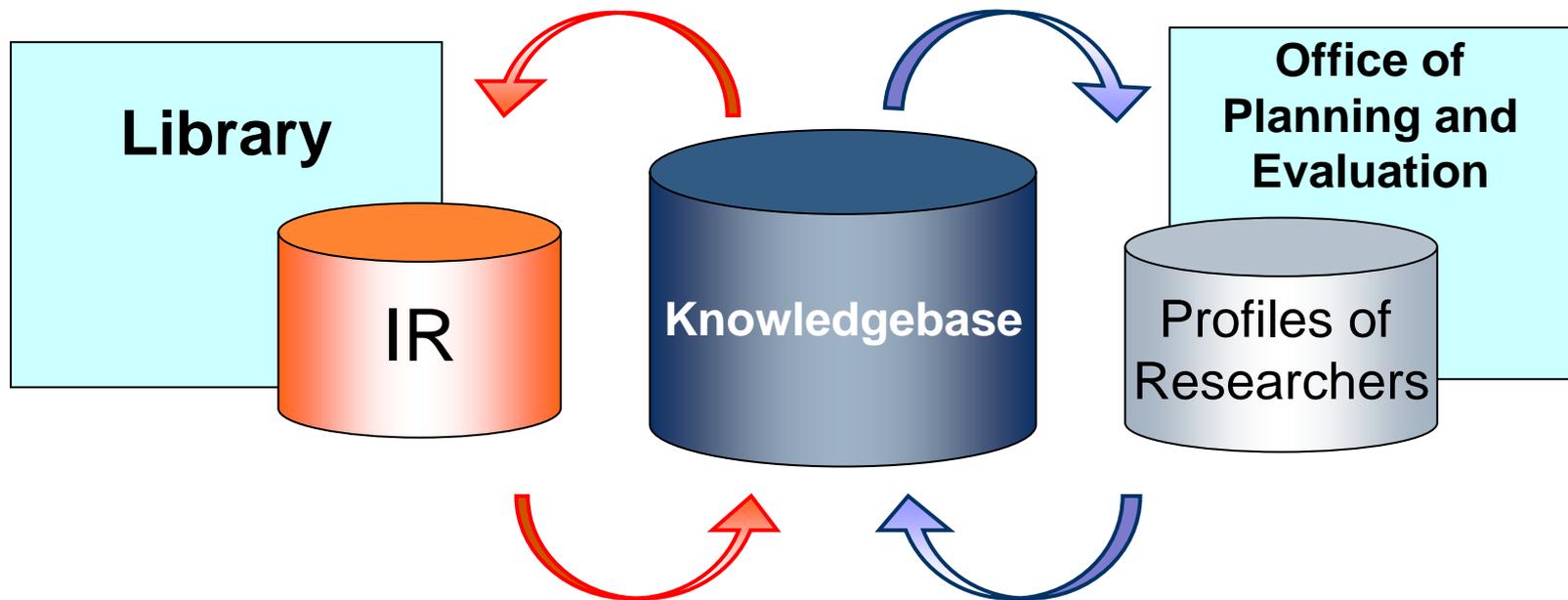
Bottom up

Marketing activities

◆ **Departmental briefing** **574 faculty members have attended**

（19 meetings since 2006.2.1）

◆ 20-30 min before department meeting

◆ Explanation by Director of University Library and library staff

  ◆ What is institutional repository?

  ◆ Significance for university, researchers, and scholarly communication

  ◆ Motivation for item registration

◆ Q and A

Marketing activities: Feb-Jul 2006

説明会

説明会はご要望に応じて開催します。少人数のグループでも構いませんのでお問合せください。

<スケジュール>

日時	学部	場所	備考
2月　1日（水）13:00-13:30	経済学部・経済学研究科	2F　第一会議室	教授会の前の時間
2月　8日（水）13:00-13:20	文学部・文学研究科	文学部127講義室	教授会の前の時間
2月　8日（水）14:00-14:30	法学部・法学研究科	法学部　会議室	教授会の途中
5月31日（水）14:00-14:20	農学部・生命農学研究科	管理棟1階大会議室	教授会の前の時間
6月21日（水）13:30-14:00	情報科学研究科	附属図書館5階多目的室	教授会の前の時間
7月5日（水）15:00-	環境学研究科	環境総合館1階レクチャーホール	教授会の前の時間

First
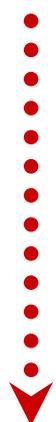
19th

http://ir.nul.nagoya-u.ac.jp/pub/koho/IR_setumeikai.html

38

Problems

◆ Researchers understand but few registrations

◆ Author versions are often lost

◆ Nervous on different appearances and contents

◆ Con: faculty evaluation

Problems

◆ FAQ

We do not want to have files publicly available if they are different from published version. Only published versions are research output.

Redundant PDF copies appear. It is not cost effective.

Researchers are professionally trained to find primary information. Then repositories are for private sectors, not for university researchers.

It is not cost effective that each university operates an institutional repository.

We want to publish our research output as books. We do not want to register them if institutional repositories work against book-form publication.

Researcher community

Initial depositors

◆ Allow IR deposit of files on personal webpages.

◆ Mention to NAGOYA Repository on their websites

◆ Propose e-submission of theses at department meetings

Researcher community

◆Allow IR deposit of files on personal webpages.

Thank you for your briefing on institutional repository. The idea impressed me.

Some PDF of my papers are available on the web server of my office.

Please deposit them if there is no problem. I will make links to your repository from my website.

Researcher community

◆Mention to NAGOYA Repository on their websites

　Links with handle from the paper list

August 18 (Fri.), 2006
Deposited the following papers with permission of △△ society. Near xxx
xxxxxx   xxxx xxxx   Annals of the ・・・

http://hdl.handle.net/2237/**

August 16 (Wed.), 2006
Link from my paper list to Nagoya Repository

 August 11 (Fri.), 2006
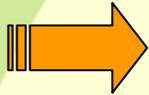Got a completion notice of Nagoya Repository deposit. They are helpful. They
negotiated with ○○○○.

Researcher community

◆ Forming a community of IR-friendly researchers to enhance deposits

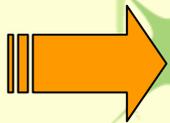◆ Forming a community of hundreds of researchers to support IR

Significance for researchers

■ **Researchers can disseminate their own outputs to the world**

➡ **More access, more visibility
cited 5.6 times more in physics**

➡ **All outputs of a researchers will become
searchable and accessible
when more data are accumulated**

45

Significance for researchers

- **University stewards digital files for the next generation**

- **Permanent access**

  URL: http://hdl.handle.net/2237/4377

  NAGOYA Repository

  Paper number

Problems

◆Copyright permission

  ◆Too much care of publishers and academic societies

  ◆Paper list becomes not comprehensive if some are not permitted

  ◆Time consuming process for permission

  ◆Contacts to coauthors are sometimes difficult

Problems

◆ Publishers and academic societies

Copy-right transfer is common. So publishers and societies are in charge of permission, not authors.

I published my dissertation as a book this January. It is not polite to the publisher that I deposit the file to IR. I will consider to deposit it 3 years later.

IEEE holds the copyrights of papers published by IEEE. I believe that authors can personally distribute a copy, but universities cannot, since nobody will buy a paper from IEEE. Please doublecheck.

Copyright policies

◆ **Publishers out of Japan**

  ◆ SHERPA

  Publisher copyright policies & self-archiving

  http://www.sherpa.ac.uk/romeo.php

  ◆ Investigation of copyright policies on the websites of publishers and academic societies

  ◆ Hearing if unclear or unable

Copyright policies

◆Publishers in Japan

◆ JANUL IR support website
http://www.tulips.tsukuba.ac.jp/ir/

A quick report on copyright

◆ Investigation of copyright policies on the websites of publishers and academic societies

◆ Hearing if unclear or unable

※intended to enhance clear copyright documentation

Copyright policies

◆ Publishers　　　　investigation results

　◆ OK for publishers version

　　　　IEEE・AIP・INFOSTA・IPSJ

　◆ Individual permission・・IEICE

　◆ Under consideration・・NLP・JSPE…

　◆ No reply・・Astronomy

　◆ No permission・・IEE・JSPE

Publishers' attitudes toward IR

■ **75% of publishers and 93% of journals agree self-archiving outside of Japan**

RoMEOプロジェクトの調査結果より
http://romeo.eprints.org/stats.php

- 604 7%
- 2131 25%
- 5946 68%

Legend:
- ■ ポストプリント（査読後の著者最終稿）の自主保管を認める雑誌
- □ プレプリント（査読前の投稿原稿）の自主保管を認める雑誌
- ■ 自主保管を認めない雑誌

※ Most permit author version, while some permit publisher version.

■ **Domestic journals: under investigation by JANUL**
Many publishers are under considerations

■ **Self-archiving with author permission only is OK if there is no documented copyright condition (e.g. proceedings of international conferences)**
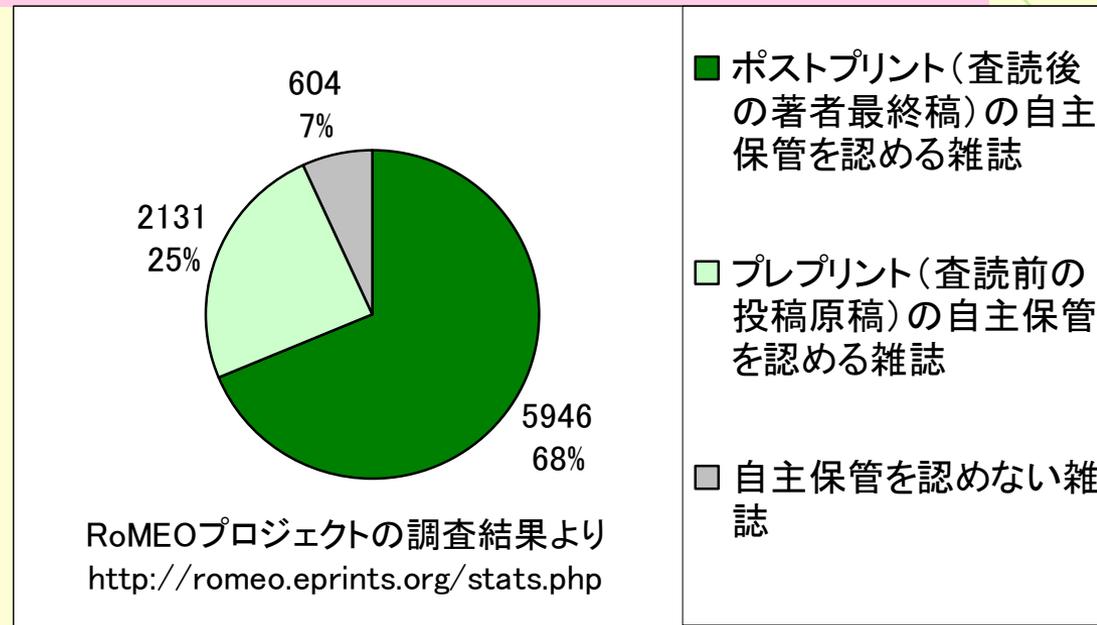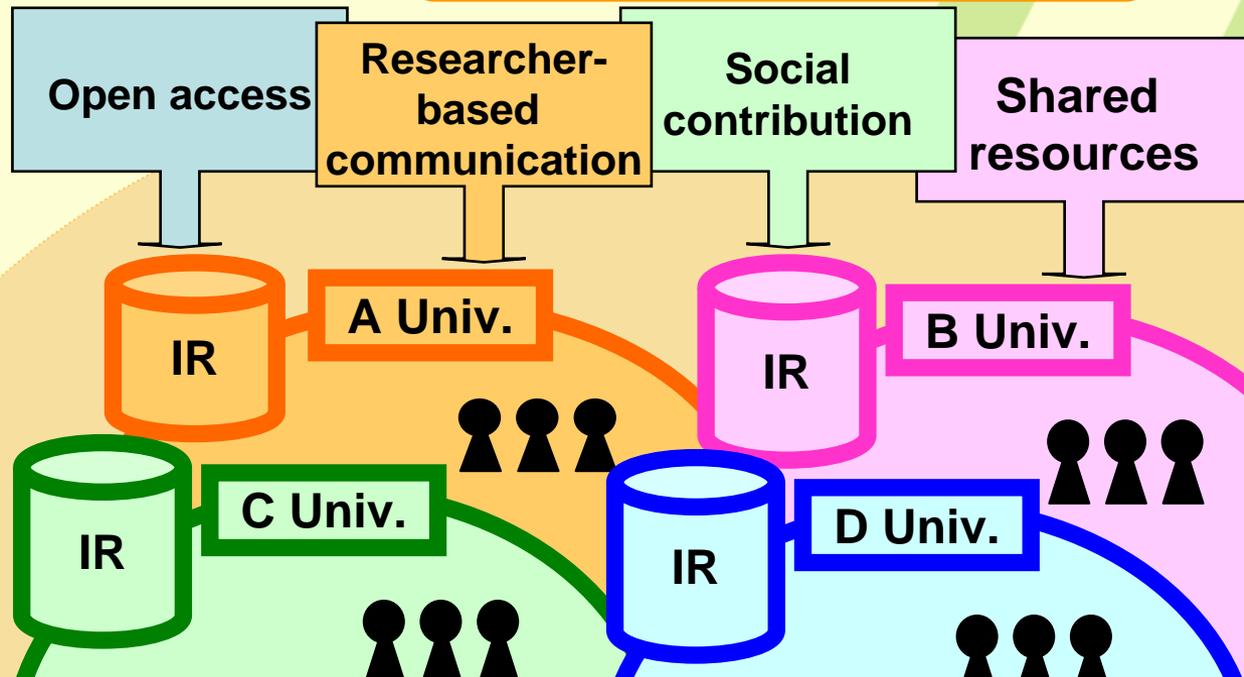
Problems

◆ Summary

   ◆ Researchers should sufficiently understand copyright issues

   ◆ Libraries provide and update copyright information

   ◆ Libraries negotiate with publishers on behalf of authors

Objections are better than ignorance

Ongoing content collection

◆ Dissertations submitted to graduate school of information science

  ◆ Deposit request and agreement form are distributed at dissertation orientation

  ◆ Electric files of dissertations are forwarded to the university library

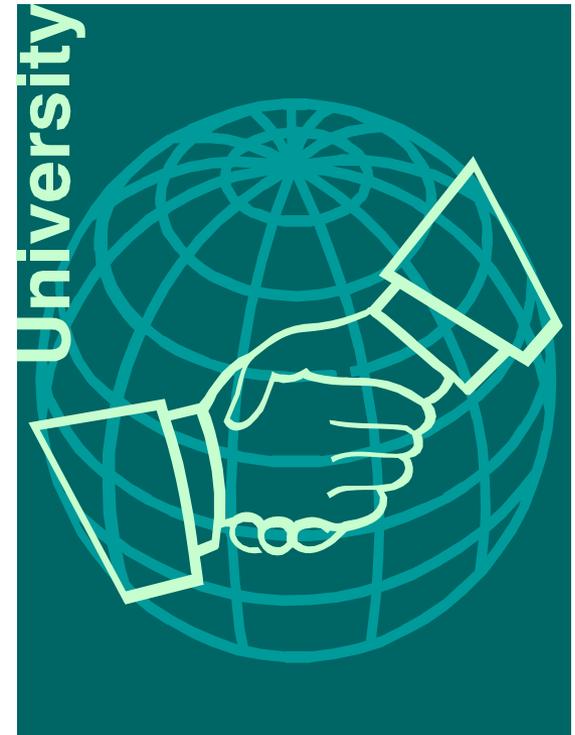Graduate School of Information Science

Library
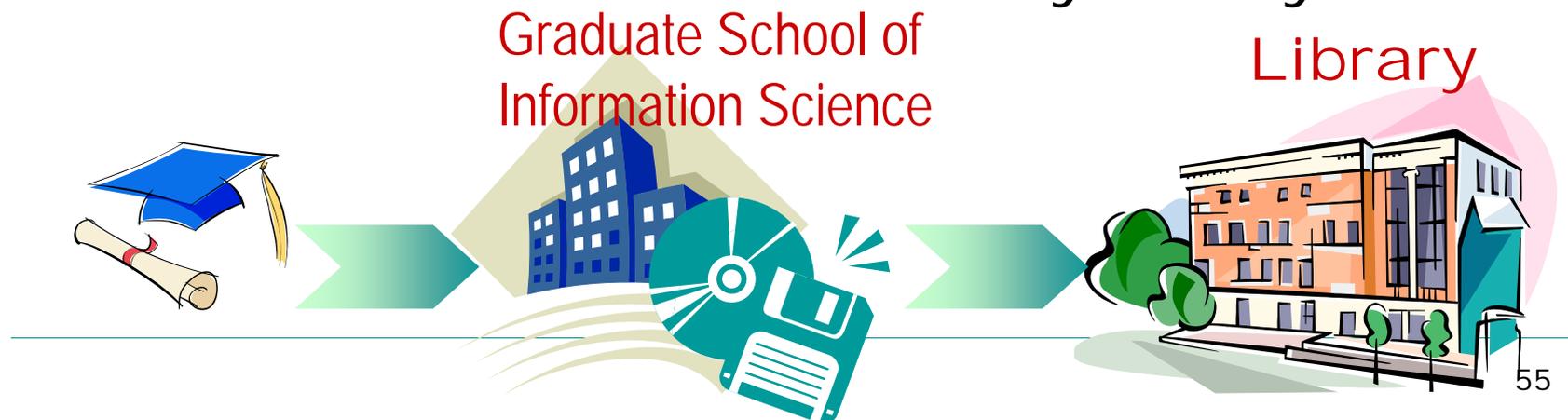
NAGOYA Repository Cooperation

Interuniversity collaboration

◆ CSI operation, area 2：innovative research and development

   ◆ Development of link
      resolver ready system

       Hokkaido (main)

       Tsukuba, Chiba,

       Kyushu, Nagoya

University

Inter-university collaboration

◆ Development of link resolver ready system

AIRway（ Access path to Institutional Resources via link servers ）

   ◆   More access counts to institutional repositories

   ◆   More visibility

   ◆   Metadata standard and system implementation

2006/10/25　AIRway Mailing List
>> AIRWay本番用サーバを立ち上げました。
>> http://airway.lib.hokudai.ac.jp/airway/index.jsp
>>
>> 現在，HUSCAPとNAGOYA Repositoryのデータが入っています。

Inter-university collaboration

◆ **Meetings of IR staff in national universities in Tokai area**

   ◆ Toward collaboration in the area

   ◆ Sharing experiences of Nagoya University
   NAGOYA Repository Labs. (website)
   http://info.nul.nagoya-u.ac.jp/pubwiki/

◆ **CSI operation symposium in Tokai area**

   1. UPKI 9/22
   2. IR 11/8
   3. UPKI and grid computing 12/15