

# Institutional Repository in Japan

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“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

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No university with no institutional repository can bear social accountability

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

# Outline

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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

# Policies for scholarly information infrastructure

1

**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 2

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, 3<sup>rd</sup> 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

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- ◆ 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

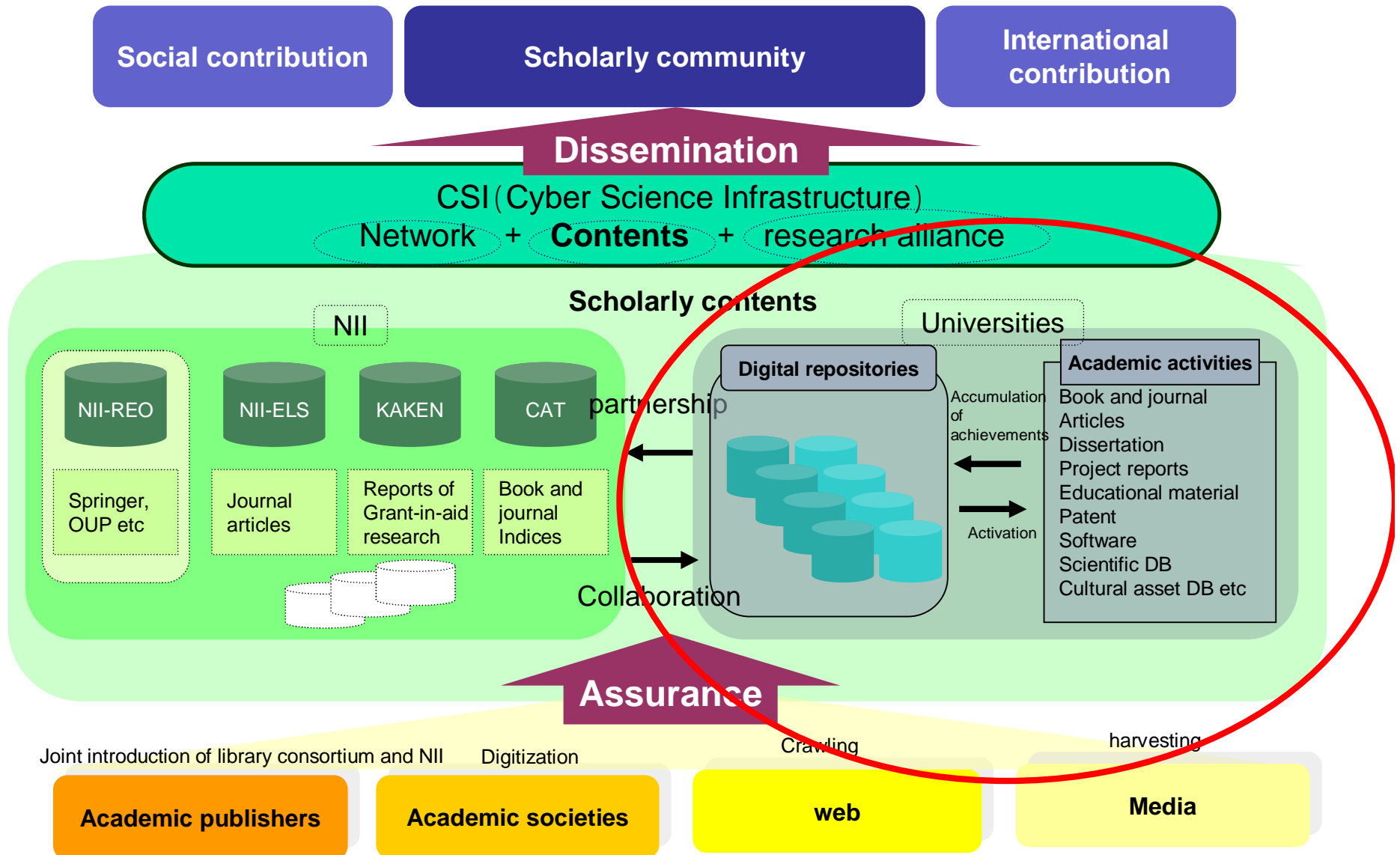


# Activities of university libraries 2

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- ◆ 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



# Commissioned project 2005

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- ◆ 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)

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- ◆ 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

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- ◆ 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

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# Current situation of NAGOYA Repository

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## ◆ 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**

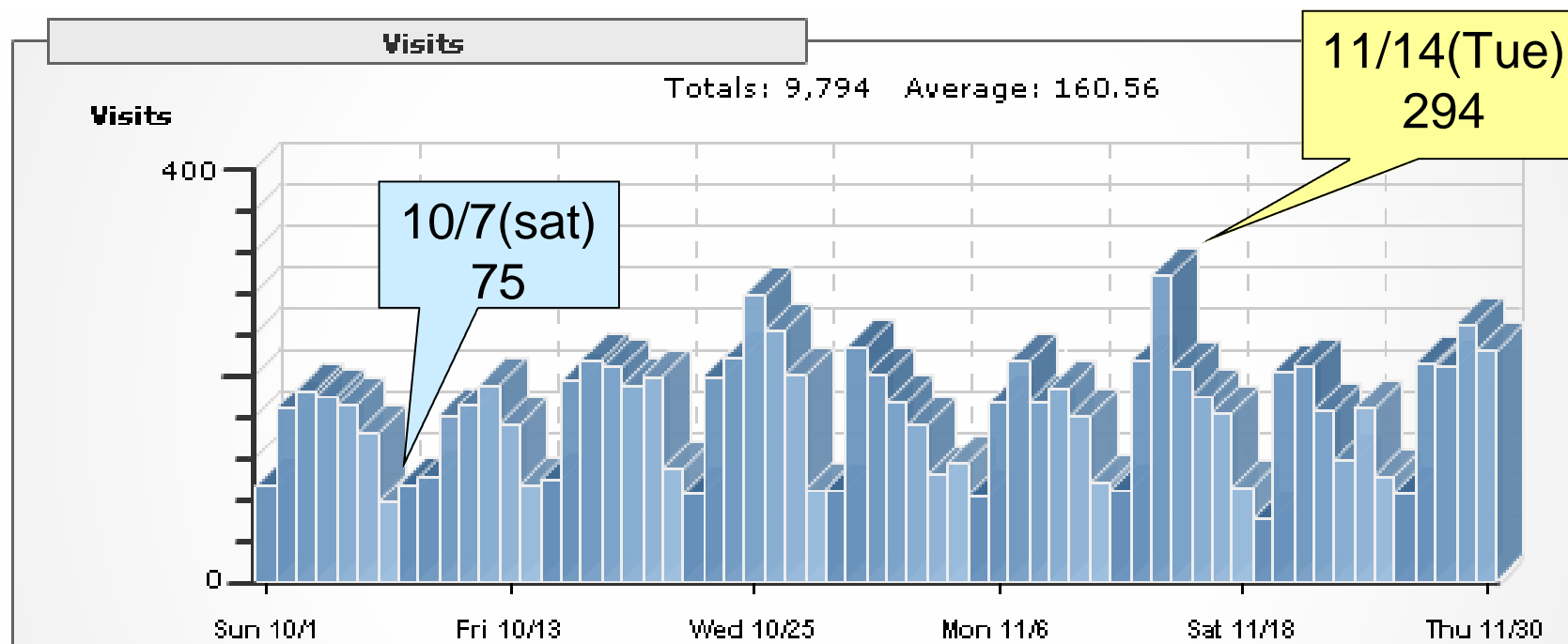
# Usage: NAGOYA Repository

## ◆ Visits

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

**Average 161/day**

**max: 294 min: 75**





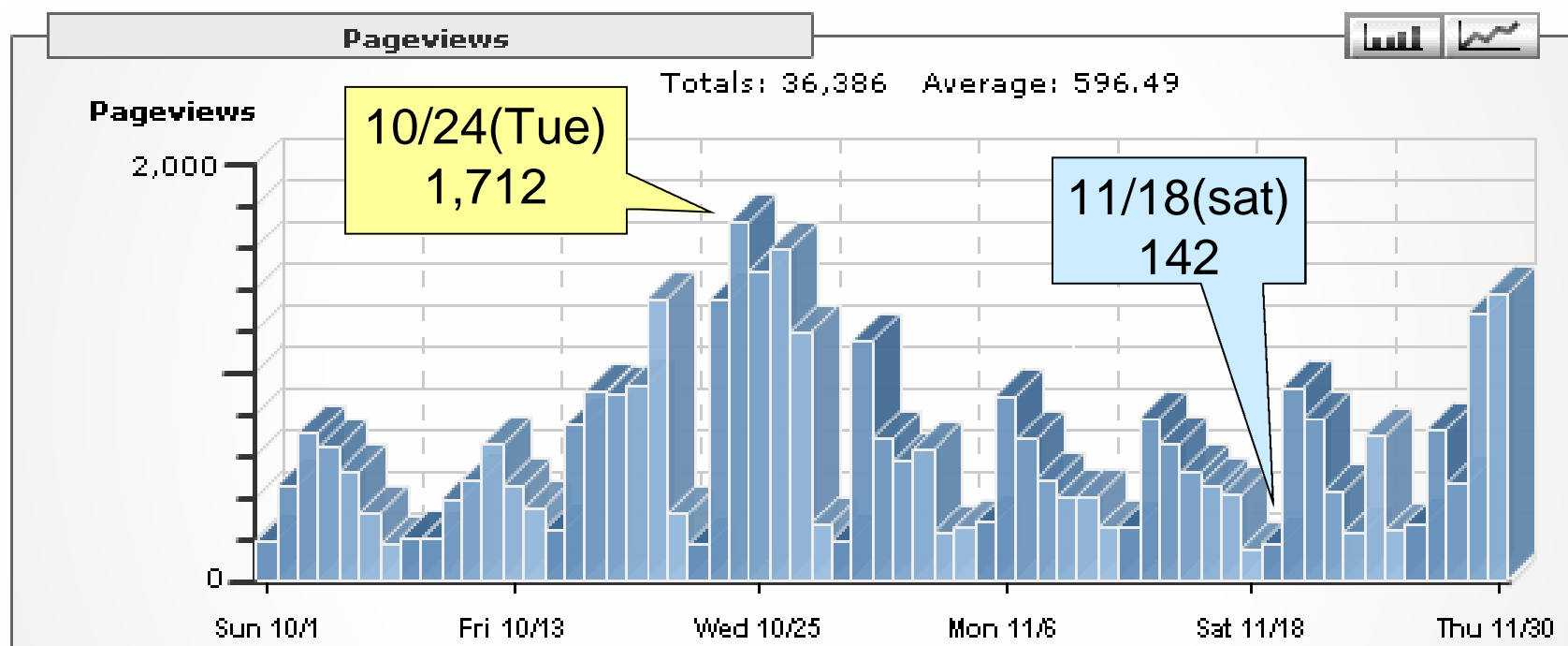
# Usage: NAGOYA Repository

## ◆ Page views

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

**Average 596/day**

**max:1,712 min:142**

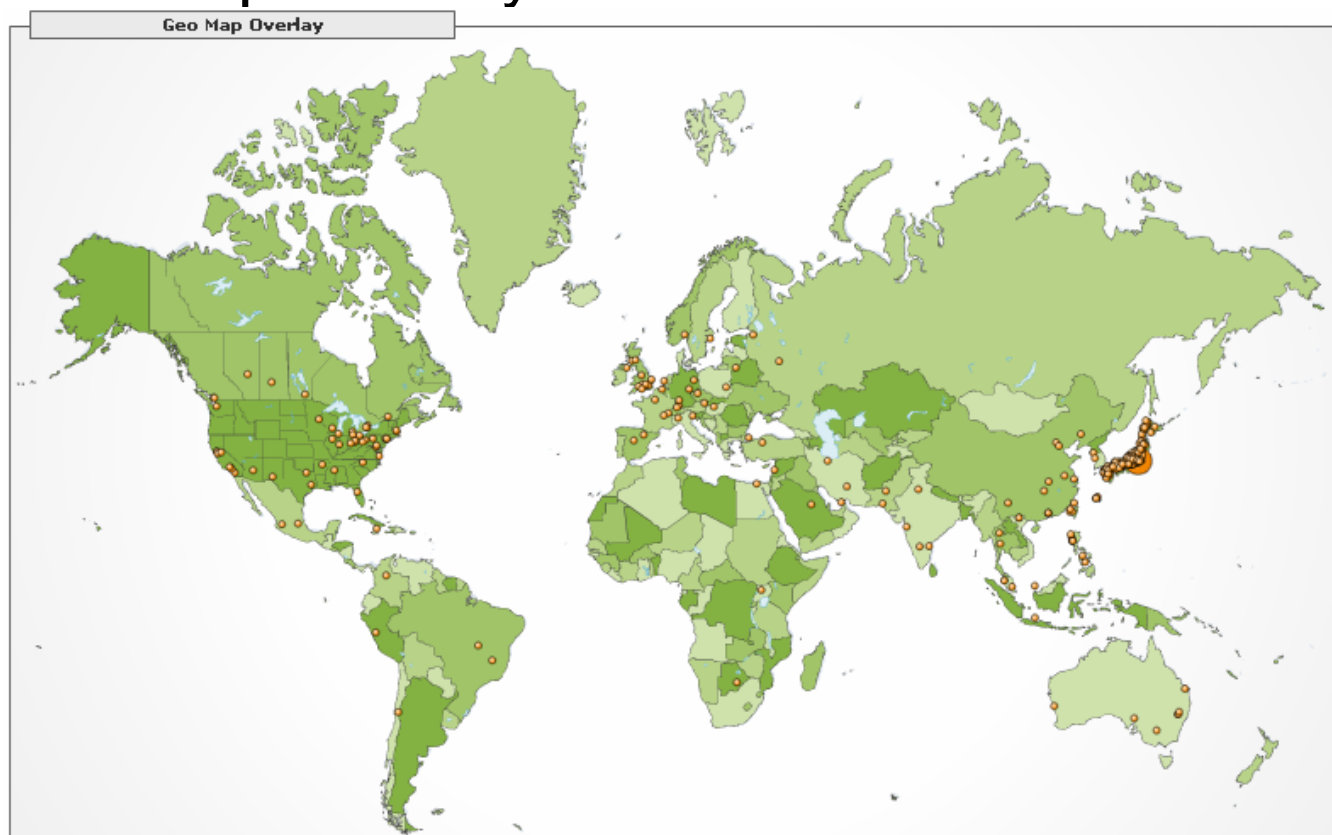


# Usage: NAGOYA Repository

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## ◆ Geo Map Overlay

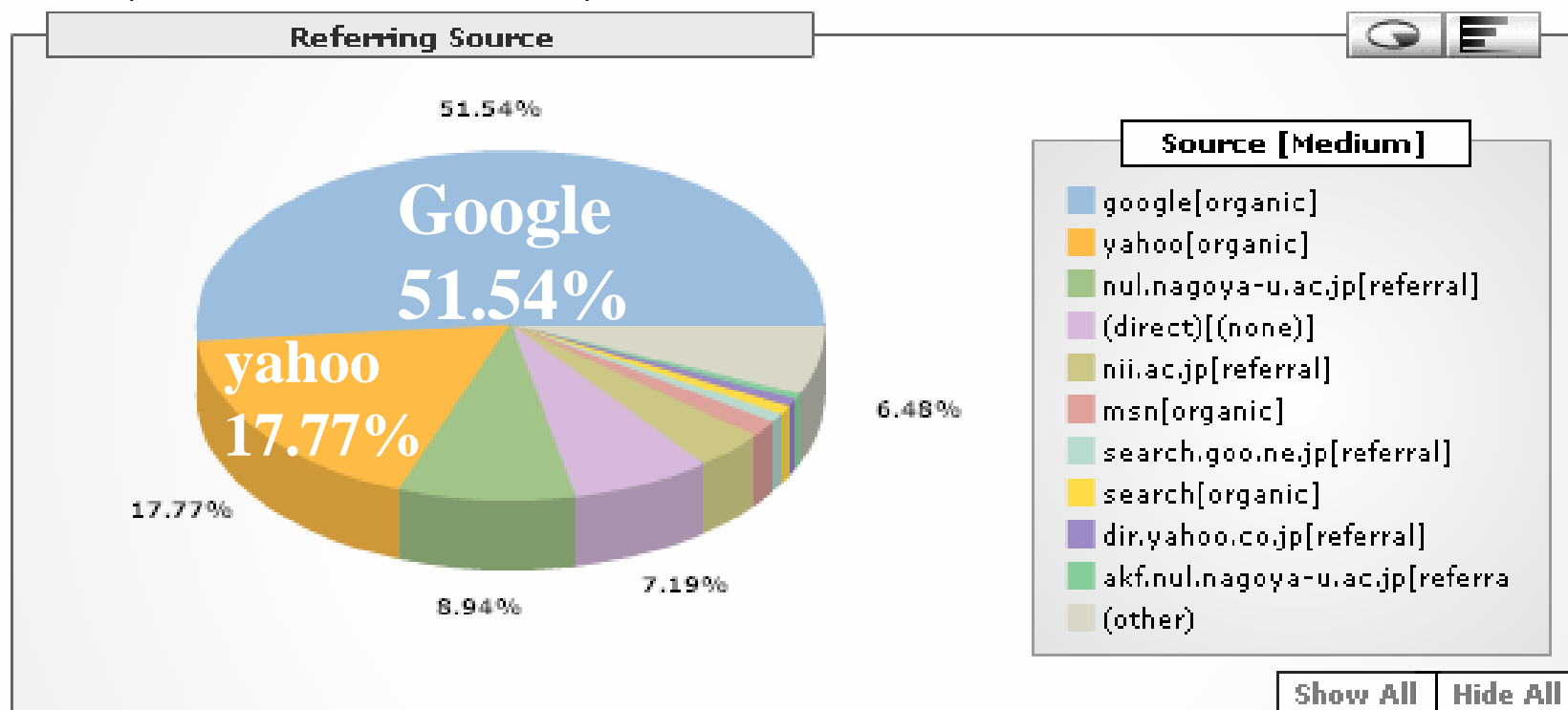
**Access from worldwide**



# Usage: NAGOYA Repository

## ◆ Referring source (10/1/2006-11/30/2006)

70% from Google  
or Yahoo



# Usage: NAGOYA Repository

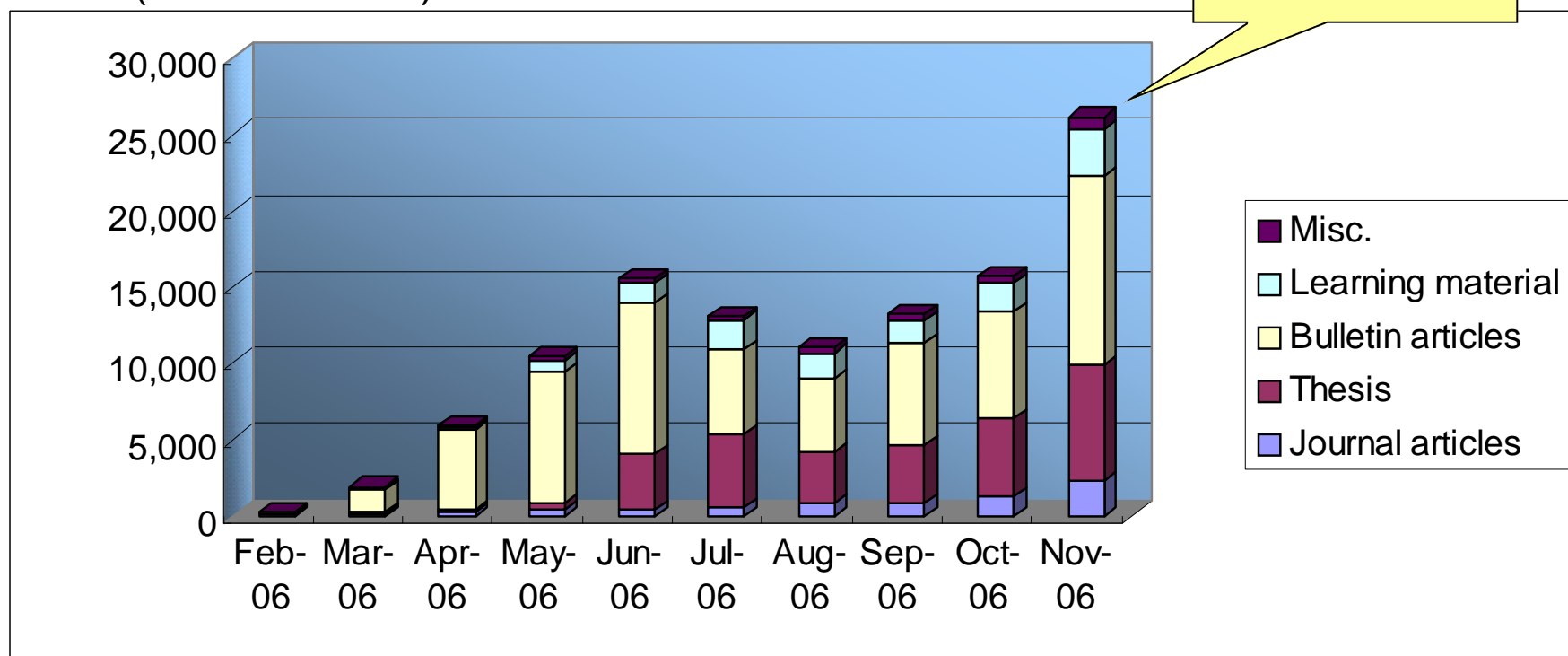
**Total 113,619**

◆ # 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)



# Usage: NAGOYA Repository

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## ◆ 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)

A large banner for the Nagoya Repository. It features a light green background with three dark green circles of increasing size in the upper right corner. The text "NAGOYA Repository" is prominently displayed in a large, dark green font. Below it, in smaller Japanese text, is "名古屋大学 学術機関リポジトリ". A blue URL is provided: <http://ir.nul.nagoya-u.ac.jp/dspace/>. The date "2006.2.28" is written in red. Below the date, the phrase "名大から世界へ" (From Nagoya University to the world) is written in black. A red arrow points to the right, with the text "研究成果を公開" (Public research results) written in black below it.



# Place within Nagoya University

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- ◆ 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

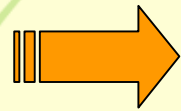
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## University-wide operation

- ◆ University-wide
  - = necessary for **perpetual stewardship**
- ◆ Presidential briefing 2005/11/29
- ◆ Board briefing 2005/12/20

# Significance for university

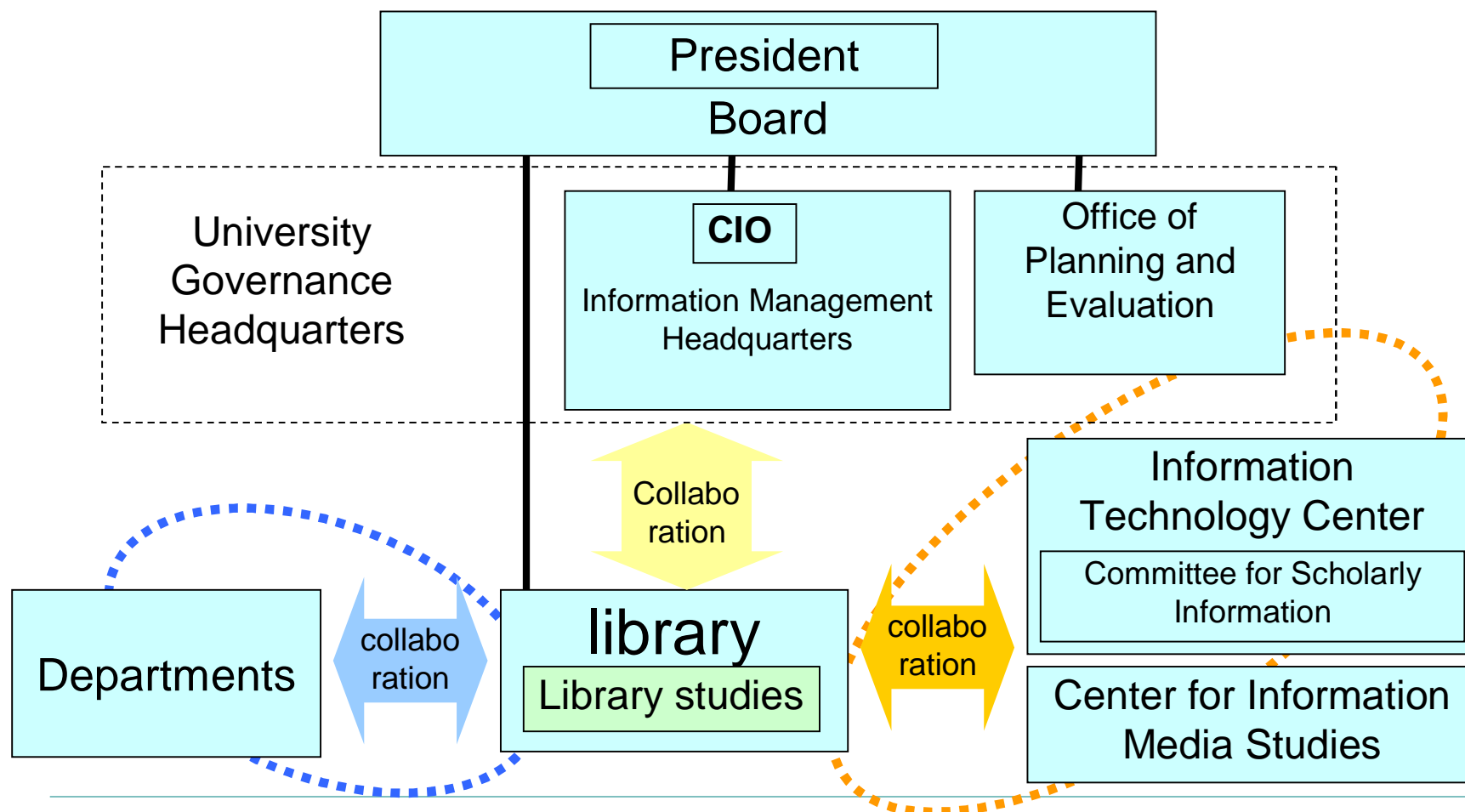
**Emphasize the strength of Nagoya U  
Social Accountability**



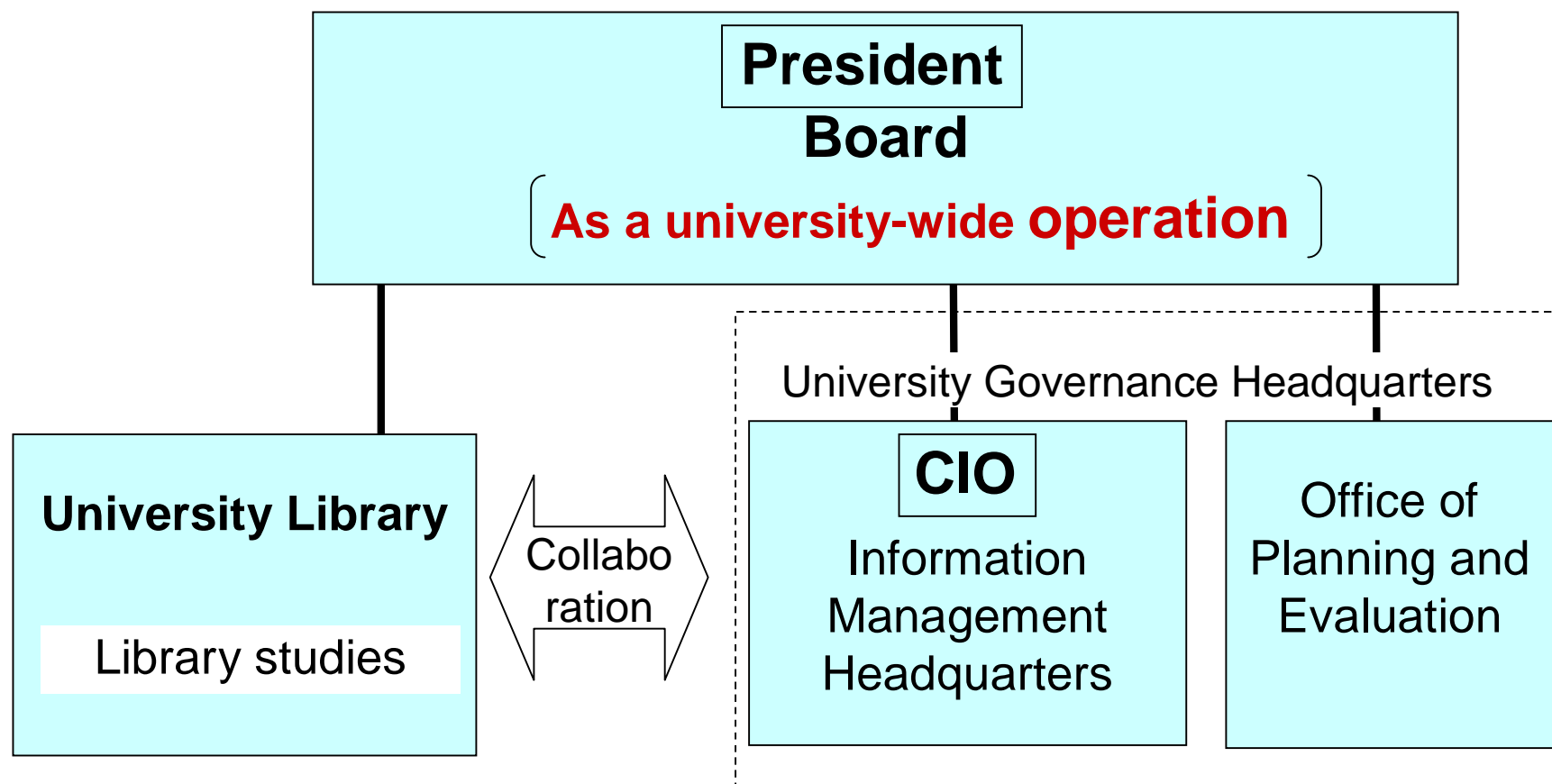
University-wide operation



# Place within Nagoya University (a big picture)



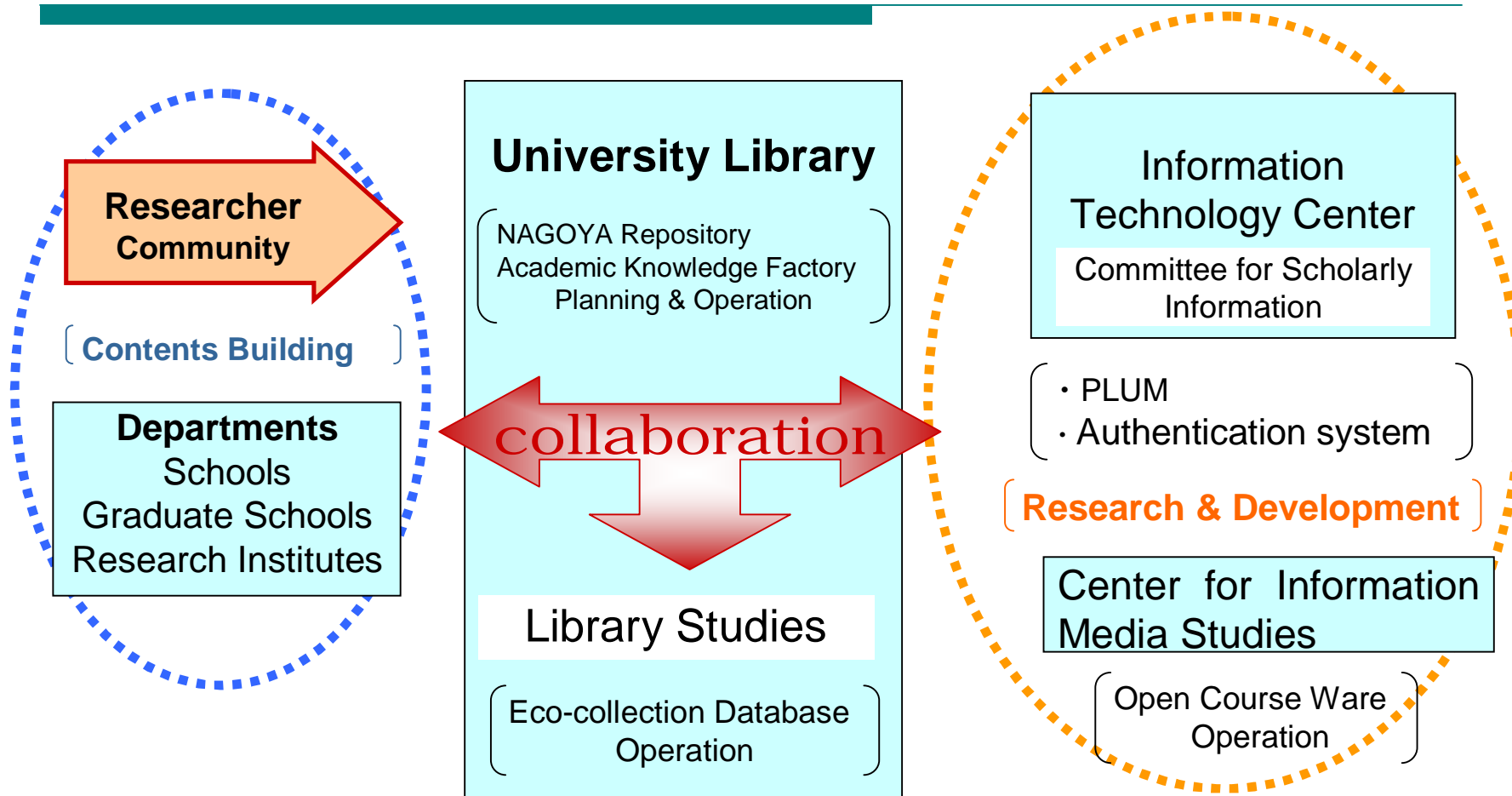
# Place within University (Executive level)



— Tie-up



# Collaboration with in-campus organizations



# Collaboration with in-campus organizations

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- ◆ University Library Studies
  - =System development & Support
- ◆ Eco-Collection database
- ◆ AKF: Academic Knowledge Factory



# Collaboration with in-campus organizations

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- ◆ Information Technology Center  
=System development & support
- ◆ PLUM
- ◆ Nagoya Univ. ID system  
(Authentication)

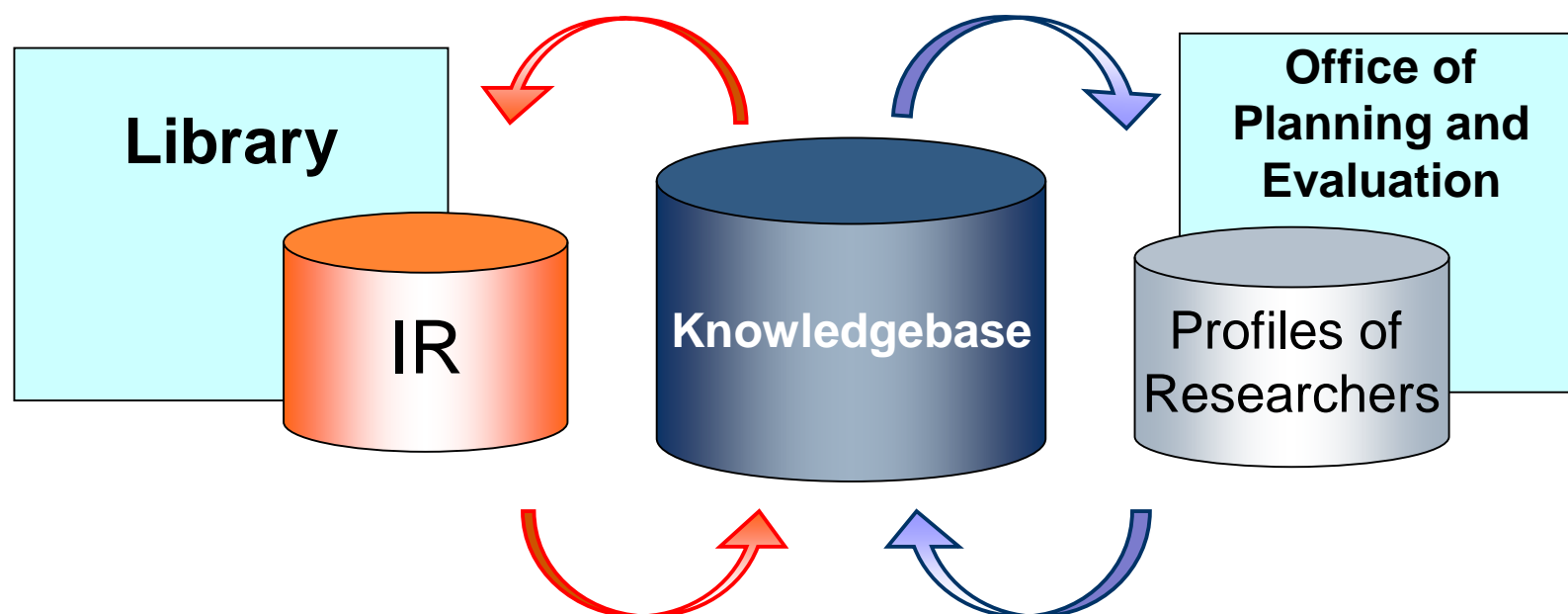
# Collaboration with in-campus organizations

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- ◆ Center for Information Media Studies  
=Research and development
- ◆ Nagoya University Open Course Ware  
LOM = Learning Object Metadata  
NIME (National Institute of Multimedia Education) LOM

# Collaboration with in-campus organizations

- ◆ The Office of Planning and Evaluation  
Nagoya University Profiles of Researchers





Bottom up

# Marketing activities

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- ◆ 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

説明会の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](http://ir.nul.nagoya-u.ac.jp/pub/koho/IR_setumeikai.html)

# Problems

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- ◆ Researchers understand but few registrations
- ◆ Author versions are often lost
- ◆ Nervous on different appearances and contents
- ◆ Con: faculty evaluation

# Problems

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## ◆ 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

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## 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

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## ◆ 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

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## ◆ 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](#)  
[xxxxxxx](#) [xxxx](#) [xxxx](#) Annals of the ...

[http://hdl.handle.net/2237/\\*\\*\\*\\*](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

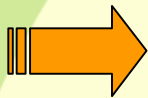
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- ◆ Forming a community of IR-friendly researchers to enhance deposits
- ◆ Forming a community of hundreds of researchers to support IR

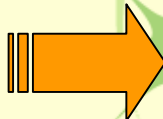


# Significance for researchers

**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**

# 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

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- ◆ 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

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## ◆ 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

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- ◆ 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

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- ◆ 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

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- ◆ 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

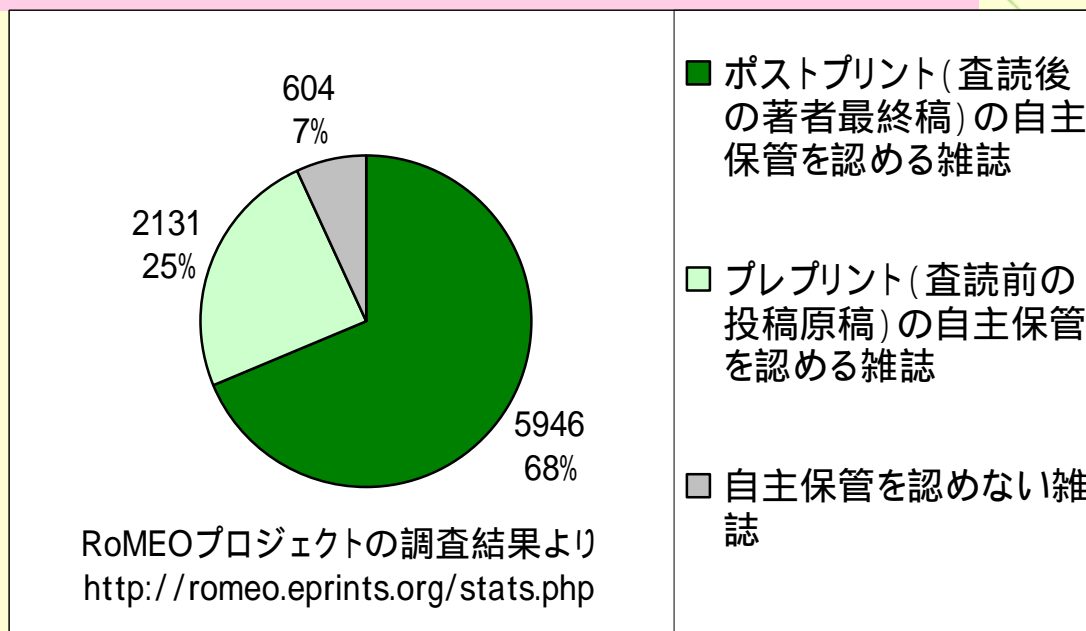
75% of  
publishers and  
93% of journals  
agree self-  
archiving outside  
of Japan

Most permit author version, while some  
permit publisher version.

**Domestic journals: under investigation by JANUL**

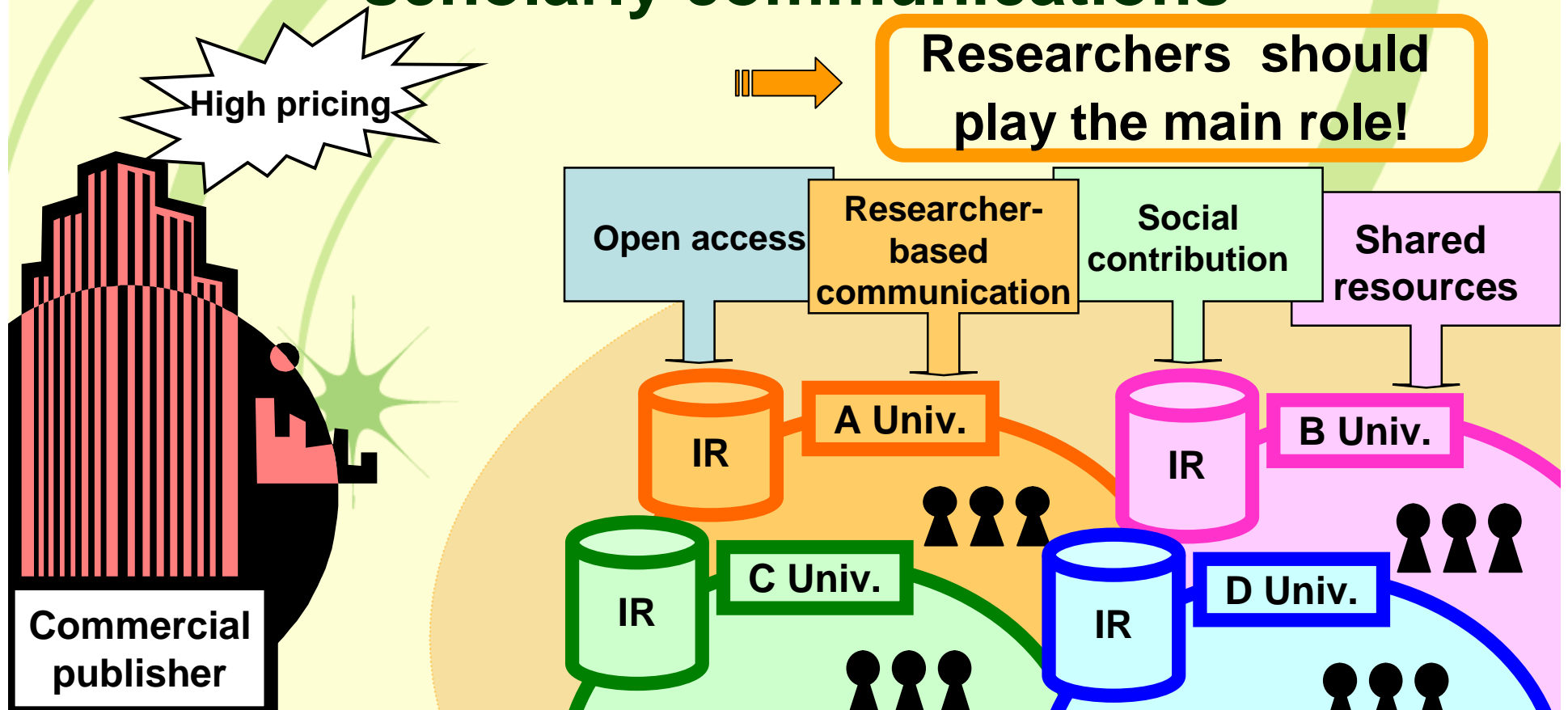
**Many publishers are under considerations**

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



# Significance in scholarly communication

## Commercialistic publishers lead scholarly communications



# Problems

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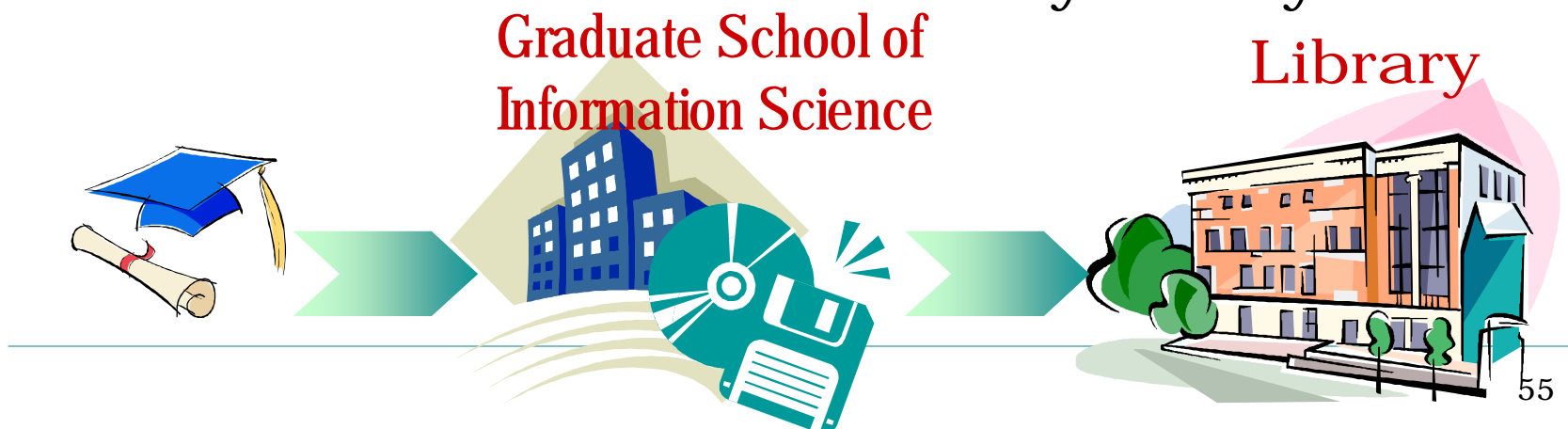
- ◆ Summary
  - ◆ Researchers should sufficiently understand copyright issues
  - ◆ Libraries provide and update copyright information
  - ◆ Libraries negotiate with publishers on behalf of authors

Objections are better than ignorance

# Ongoing content collection

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- ◆ 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





**NAGOYA**

**Repository**

Cooperation



# Interuniversity collaboration

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- ◆ CSI operation, area 2 : innovative research and development
- ◆ Development of link resolver ready system

Hokkaido (main)  
Tsukuba, Chiba,  
Kyushu, Nagoya



# Inter-university collaboration

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## ◆ 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

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- ◆ 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

Top-down

Tie-up



Cooperation

Bottom up