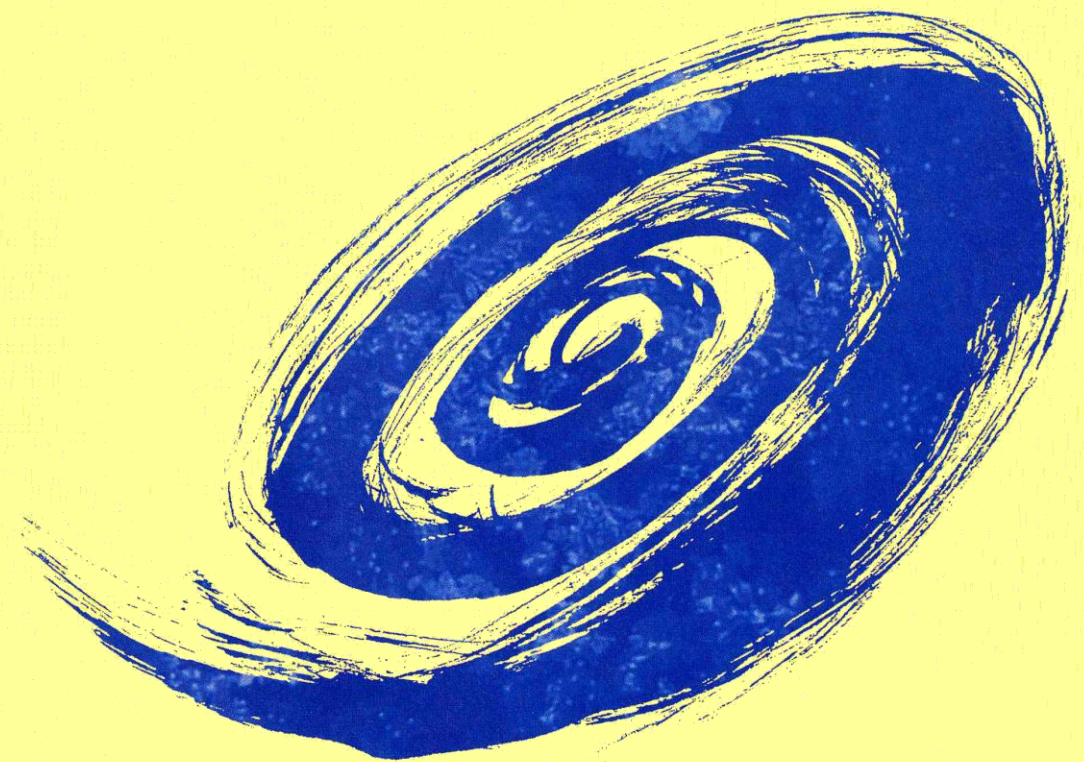


**UMIN** **Infrastructure for Academic Activities**  
**University hospital Medical Information Network**





SINCE 1989

UMIN is now **important information infrastructure** for academic activities of biomedical sciences in Japan, and it is **the largest and most versatile academic medical information network** in the world.

## Foreword

The purposes set for UMIN at the time of its establishment are now fully realized with the recent establishment of education-related services such as online evaluation systems for medical education and post-graduate clinical training. I sincerely thank everybody who has contributed to UMIN activities, especially the former chairpersons, Drs. Kaihara and Sakurai, along with the successive groups of staff members from the Medical Education Division of the Ministry of Education, Culture, Sports, Science, and Technology. I hope everyone will continue to understand and to support the future activities of UMIN. I believe that all UMIN services for medical professionals and students will finally be available to the general public in the form of good medical practice.

My hope is that this brochure serves to promote a fuller and better understanding of UMIN and facilitates the use of its services.

Sincerely,

Chairperson, University hospital Medical Information Network Council of the National University Hospital Association

Tetsuya Igarashi, M.D., Ph. D. (Tsukuba Univ.)

## What does “Infrastructure for Academic Activities” mean?

### Who can use the infrastructure?

Any academic-related individuals and organizations!

- (1) Individual researchers
- (2) Research laboratories
- (3) Research groups
- (4) Academic societies
- (5) Universities and research institutes

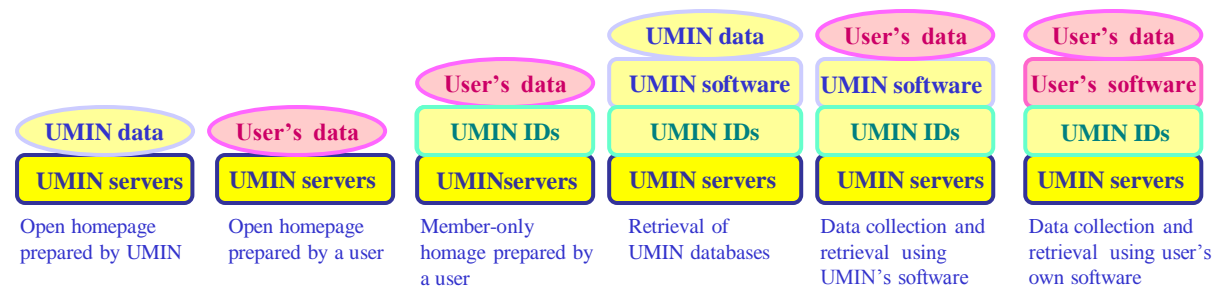
### What purposes is the infrastructure used for?

Any academic-related purposes!

- (1) **Research:** Data management of clinical trials, abstract entry for academic meetings, research fund information, etc.
- (2) **Education:** Electronic textbooks, VOD image database, online evaluation of medical education and practice, etc.
- (3) **Clinical practice:** Drug information, intoxication database, online manuals, etc.
- (4) **Others:** Preparation of homepages, communication using mailing lists, email addresses for groups, etc.

### Which resources of the infrastructure can be used?

Any combinations of UMIN servers, software, IDs, and data!



## 1. Purposes

1. Provide up-to-date information to healthcare professionals
2. Support collaborative projects among university hospitals
3. Promote communications between healthcare professionals
4. Support collaborative clinical and epidemiological research
5. Standardize medical data and collect hospital statistics
6. Support medical education and clinical training

## 2. History

- 1988** UMIN and its Steering Committee established in the Hospital Computer Center, the Univ. of Tokyo Hospital.
- 1989** UMIN started its NI-protocol-based services.
- 1994** UMIN started its Internet-based services.
- 1997** UMIN established its Electronic Library for Biomedical Sciences (ELBIS).
- 1998** UMIN stopped its NI-protocol-based services.
- 1999** UMIN started its VPN network (UMIN VPN) for national university hospitals.
- 2000** UMIN established its Internet Data and Information Center (INDICE) for medical research.
- 2002** UMIN Center established as an independent department in the Univ. of Tokyo Hospital.
- 2004** The Steering Committee reorganized into the UMIN Council under the National University Hospital Association.  
The first professor of the UMIN Center was installed.

## 3. Organization (Feb. 1<sup>st</sup>, 2008)

### National University Hospital Association

#### UMIN Council

Chairperson: Tetsuya Igarashi (Tsukuba Univ.)

Members:

Representatives from university hospitals

Eleven representative university hospitals  
(four-year term)

Representatives from specialists in healthcare

Dentists  
Pharmacists  
Nurses  
Clinical laboratory technicians  
Education and clinical training  
Clinical and epidemiological research  
Infection control

Other Representatives

UMIN Center  
National Institute of Informatics  
Information Technology Center, Univ. of Tokyo

#### UMIN Center

Hospital Administration Subcommittee

Drug Information Subcommittee

Nursing Information Subcommittee

Laboratory Information Subcommittee

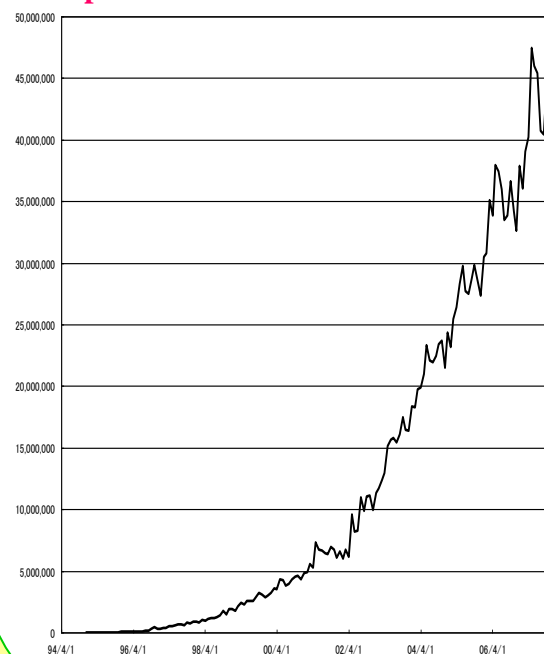
Network Technology Subcommittee

Clinical Research Information Subcommittee

## 4. Usages

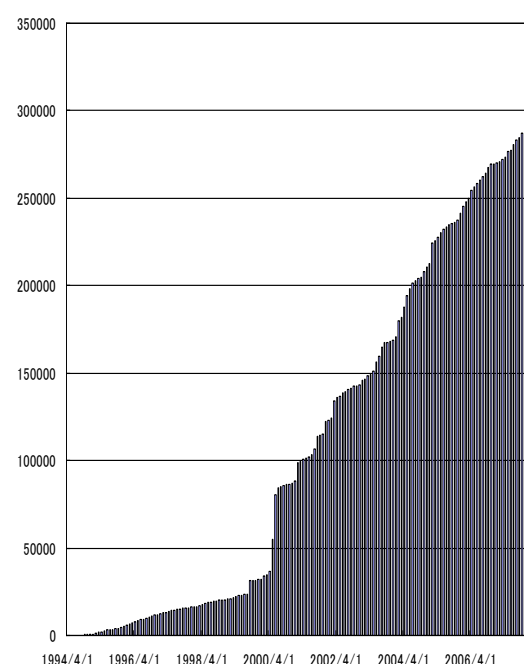
### (1) Monthly WWW page views

- More than four million page views per month



### (2) The number of registered users

- 290 thousand registered users



## 5. Application for your UMIN ID

### Caution

We are sorry that UMIN IDs are currently not issued to non-Japanese citizens who live outside Japan. An exception is those who want to use UMIN Clinical Trial Registry (<http://www.umin.ac.jp/ctr/>).

**How to get UMIN ID for registration of a clinical trial (UMIN-CTR)**

[http://www.umin.ac.jp/ctr/ctr\\_regist.htm](http://www.umin.ac.jp/ctr/ctr_regist.htm)

Please fill out the form and submit to  
**touroku@umin.ac.jp**

We will issue a UMIN ID and  
send it via mail or FAX.

If you have any questions,  
please contact us  
<http://www.umin.ac.jp/english/contact.htm>

### Qualification for application

- 1) Faculty, staff, or student of universities related to healthcare
- 2) Healthcare researchers
- 3) Healthcare librarians and clinical data managers in non-profit organizations
- 4) Trainee doctors, supervising doctors, and support staff for clinical training in postgraduate education hospitals

## 6. Lists of major services

### Research

**AC** -Academic society and meeting database

**ELBIS** -Electronic Library for Biomedical Sciences

**FIND** -Fund Information Database

**INDICE** -Internet Data and Information Center

**ROCOLS** -Recruiting System for Our Colleagues  
and Students

### Education

**EPOC** - Evaluation system for Post-graduate  
- Clinical training

**Debut** - Dental training Evaluation and taBUlation  
sysTem

**Web-QME** - Web-based system of Quality  
Management for Educational effectiveness

**VHP** - Visible Human Project image data prepared  
by NLM, U.S.A.

### Multipurpose services

#### Information and database services

*Collection of biomedical web sites*

*MINCS-UH broadcasting programs database*

*Medical terms glossary*

*Research institutes and hospitals database*

#### Homepage hosting services

*Open homepage hosting service*

*Member-only homepage hosting service*

*Archival homepage hosting service*

*VOD hosting service*

#### Communication support

*Email service*

*Mailing list service*

*News service*

*BBS service*

### Clinical practice

*Intoxication database*

*HIV manual*

*Drug information database*

*Drug information text database for pharmacists*

*Drug information text database for patients*

*Medical supplies and materials database*

*Standardized nursing procedures database*

### University hospitals

*Official document database*

*University hospital guide*

*University hospital statistics*

*Master database for patient fee calculations*

*Standardized disease nomenclature database*

*Mailing lists*

*Member-only homepages*

## 7. Reference Literature

- [1] Kiuchi T, Sakurai T, Ohe K, Ohashi Y, Kaihara S. University Medical Information Network - Past, Present and Future. MEDINFO 98. IOS press. 420-24, 1998
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- [4] Kiuchi T. UMIN INDICE and virtual coordinating centers for clinical research. Proceedings of the International Conference on Advances in Infrastructure for Electronic Business, Science, Education, and Mobile Technologies on the Internet (Summer), Telecom Italia Learning Services, 2003
- [5] Kiuchi T, Igarashi T. UMIN - Current status and future perspectives. MEDINFO 2004, IOS press, press, 1068-1072, 2004
- [6] Aoki N, Kiuchi T. UMIN Online Abstract and Paper Entry System for Biomedical Academic Meetings - An Overview and its Impact on the Distribution of Digitalized Academic Information in Japan. Methods of Information in Medicine 2007 46 6: 671-678.



## 8. Major services

Support for clinical and epidemiological study at the initiative of researchers

### INDICE UMIN Internet Data and Information Center for medical research <http://www.umin.ac.jp/indice/>

INDICE is an application service provider for Internet-based clinical and epidemiological research. Its merits are:

#### 1) Low cost

Low cost hardware and original package software provided by UMIN

#### 2) Wide experience

More than 250,000 patients registered for more than 100 research projects

#### 3) Reliability

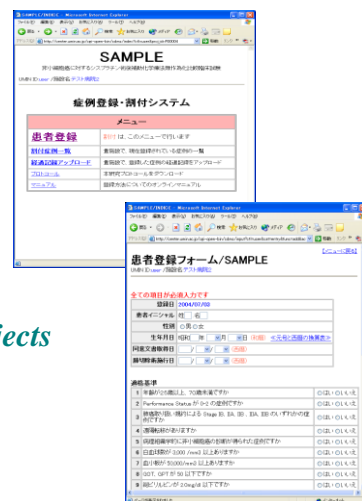
Reliable services supported by IT specialists

#### 4) Safety

Security protection mechanisms such as firewalls, encryption, and intrusion detection system, etc.

#### 5) Laborsaving

All of the system management, including that of hardware, software, users, and security performed by UMIN. More than 290 thousand UMIN IDs available for patient data entry



Quality education and clinical training based on proper online evaluation

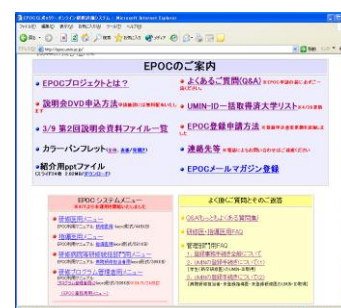
### EPOC Evaluation system for Post-graduate Clinical training <http://epoc.umin.ac.jp/>

#### 1. Characteristics

- 1) Web-based evaluations
- 2) Mutual evaluations
- 3) Laborsaving
- 4) Fast

#### 2. EPOC Users

More than one-third of Japanese residents use EPOC

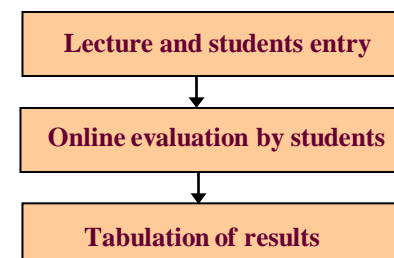


### Web-QME Web-based system of Quality Management for Educational effectiveness <http://www.umin.ac.jp/web-qme/>

#### 1. Characteristics

- 1) Web-based evaluations
- 2) Secret evaluations
- 3) Laborsaving
- 4) Fast

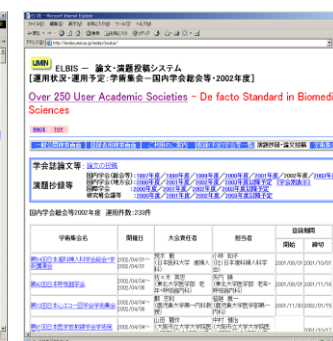
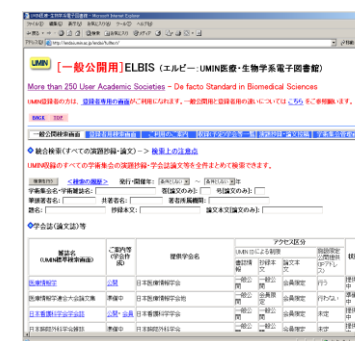
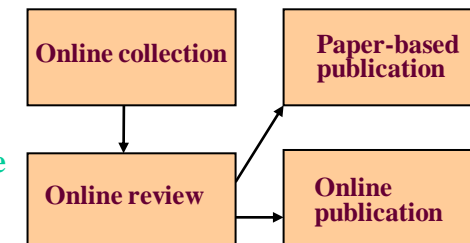
#### 2. Procedures



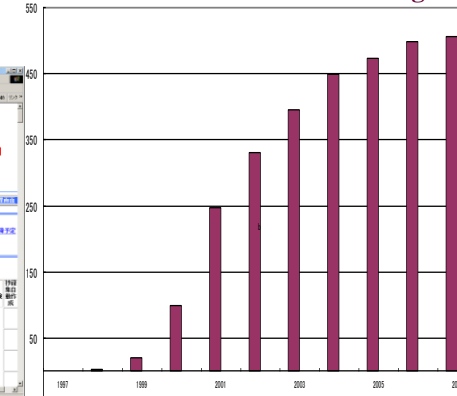
Online collection and delivery of academic information

### ELBIS UMIN Electronic Library for Biomedical Sciences <http://www.umin.ac.jp/elbis/>

- 1) Digitalization of papers and abstracts
- 2) Automated generation of bibliographic database
- 3) Laborsaving
- 4) Fast
- 5) Low cost with flexible, multifunctional software package

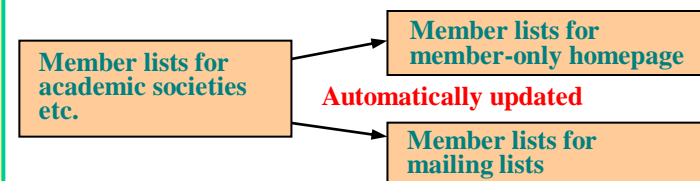


Number of user academic meetings



### OASIS Member-only homepage hosting service <http://www.umin.ac.jp/oasis/>

#### (1) Automated update of member lists for HP and ML



#### (2) Application software provided by UMIN

- 1) Member list retrieval system
- 2) Bulletin board system
- 3) Mailing list web archive
- 4) UMIN Electronic Library for Biomedical Sciences
- 5) Internet Data and Information Center for medical research



#### Major user academic societies

- Japan Academy of Nursing Science
- Japanese Association for Thoracic Surgery
- Japanese Circulation Society
- Japanese Society of Gastroenterology
- Japanese Neuroscience Society
- Japanese Society for Cardiovascular Surgery
- Japanese Society of Nephrology
- Japanese Neurosurgical Society
- Japanese Urological Association
- Japanese Society of Allergology
- Japan Endocrine Society
- Japanese Society of Pathology

**Infrastructure for Academic Activities**

**UMIN**

**SINCE 1989**

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<http://www.umin.ac.jp/>

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UMIN homepage <http://www.umin.ac.jp/> UMIN English homepage <http://www.umin.ac.jp/english/>

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English version 1.0 February the 1<sup>st</sup>, 2008