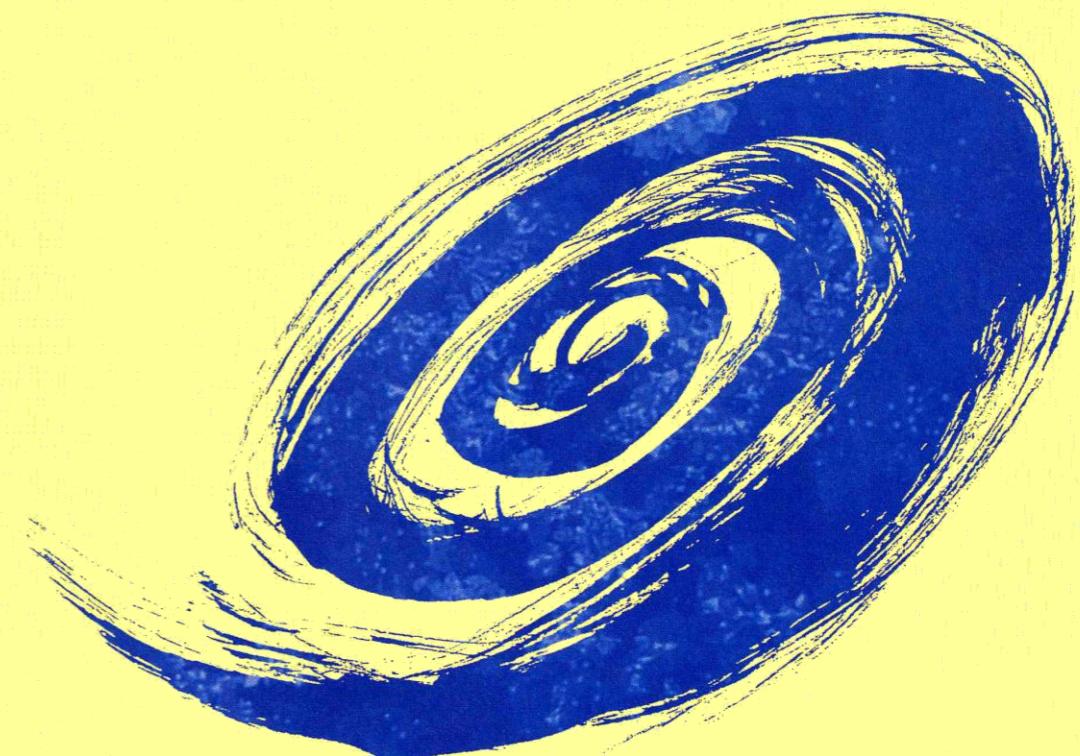


UMIN **Infrastructure for Academic Activities**
University hospital Medical Information Network



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

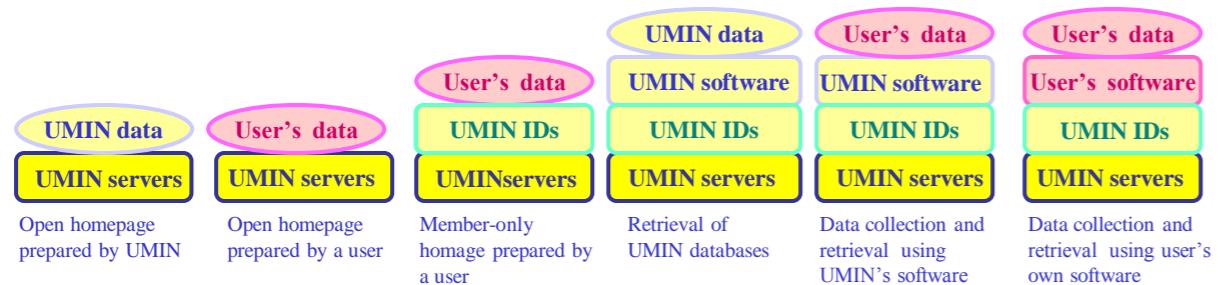
What purposes is the infrastructure used for?

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.

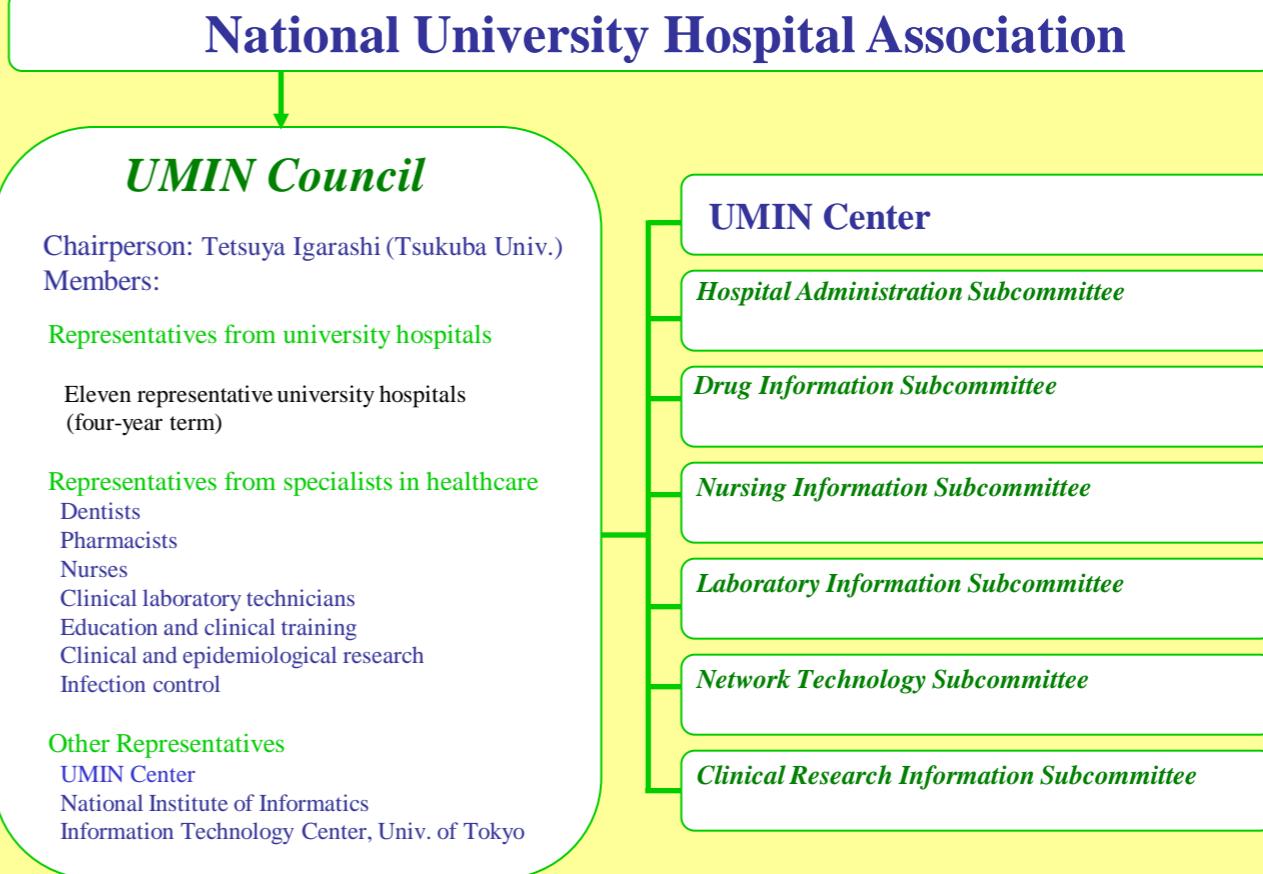
2000 UMIN established its Internet Data and Information Center (INDICE) for medical research.

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. 1st, 2008)



4. Usages

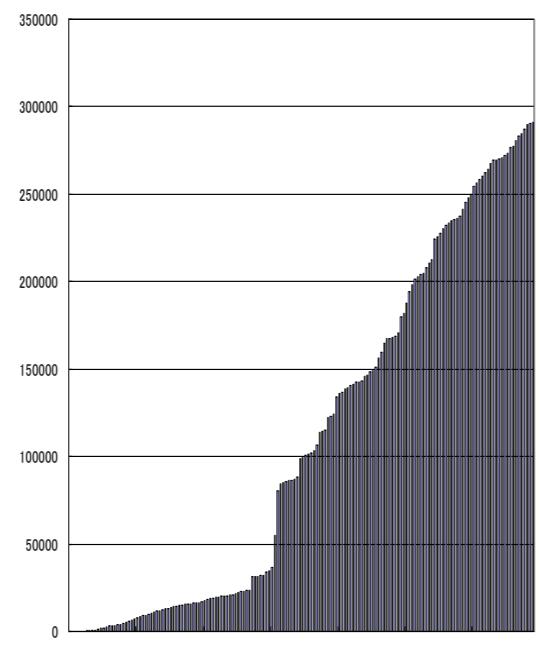
(1) Monthly WWW page views

- 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

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

[2] Kiuchi T, Takahashi T. High Speed Digital Circuits for Medical Communication; the MINCS-UH Project. Methods of Information in Medicine 39:353-5, 2000

[3] Kiuchi T, Ohe K, Sakurai T. UMIN - Key information infrastructure for the Japanese Medical Community. MEDINFO 2001 IOS press 1359-63, 2001

[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/>

INDIC 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

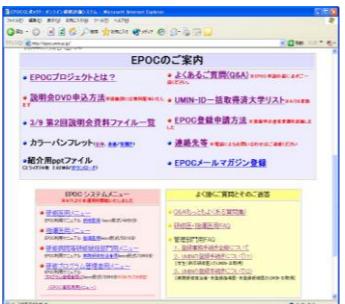
2) Mutual evaluations

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

Lecture and students entry

Online evaluation by students

Tabulation of results

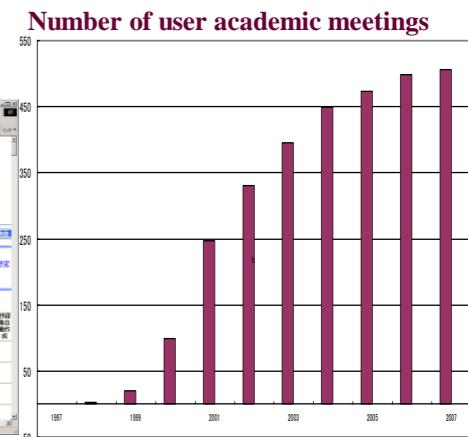
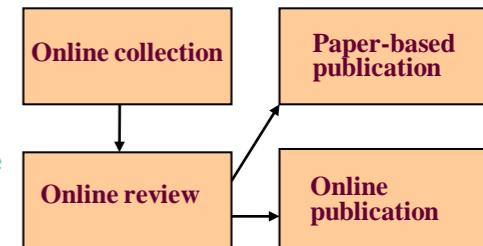


Online collection and delivery of academic information

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



OASIS

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

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

Member lists for academic societies etc.

Member lists for member-only homepage

Automatically updated

Member lists for mailing lists

(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



SINCE 1989

University hospital Medical Information Network

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

**The University hospital Medical Information Network (UMIN) Council,
The National University Hospital Association**

UMIN Center, The Univ. of Tokyo Hospital
7-3-1 Hongo, Bunkyo-ku, Tokyo 113-8655
FAX: +81-3-5689-0726
<http://www.umin.ac.jp/english/contact.htm>

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

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