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# Newsletter

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## ASSOCIATION NEWS

### How to Contact AVI

Applications for membership, accompanied by a check payable to the AVI, should be sent to:

Dr. Robin M. Starr; Secretary Treasurer, AVI;  
31575 Griffin Drive, Conifer, CO 80433  
Phone: 303/674-5231; FAX: 303/674-9717;  
e-mail: starrchi@earthlink.net

Membership application forms are available online at:

<http://www.avinformatics.org/>

Dr. Starr is responsible for distribution of the hardcopy version of the AVI Newsletter.

Newsletter items can be sent to:

Dr. Ronald D. Smith, Newsletter Editor, AVI;  
UI College of Veterinary Medicine; 2001 South  
Lincoln; Urbana, IL 61801.  
Phone: 217/333-2449  
FAX: 217/333-4628  
E-mail: rd-smith@uiuc.edu

If you are an AVI member and would like to be on the AVI Newsletter electronic distribution list, send an e-mail message to the Newsletter Editor. The electronic (PDF) version is faster, searchable, easier to store and retrieve, and environmentally friendly.

Current and past issues of the AVI Newsletter are also available on the Web at:

<http://www.avinformatics.org/>

## SECOND ANNUAL MEDICAL RECORDS INSTITUTE'S SURVEY OF ELECTRONIC HEALTH RECORD TRENDS AND USAGE

**AVI Editor's note: The following excerpts from the MRI's summary report provide insight into the forces driving the development of electronic medical records in human medicine, and why comparable efforts in veterinary medicine have been slow to materialize.**

The mission of the Medical Records Institute <<http://www.medrecinst.com/index.shtml>> is to promote the development and acceptance of electronic health record systems during this evolution. The MRI is pursuing this mission on a national and international basis by:

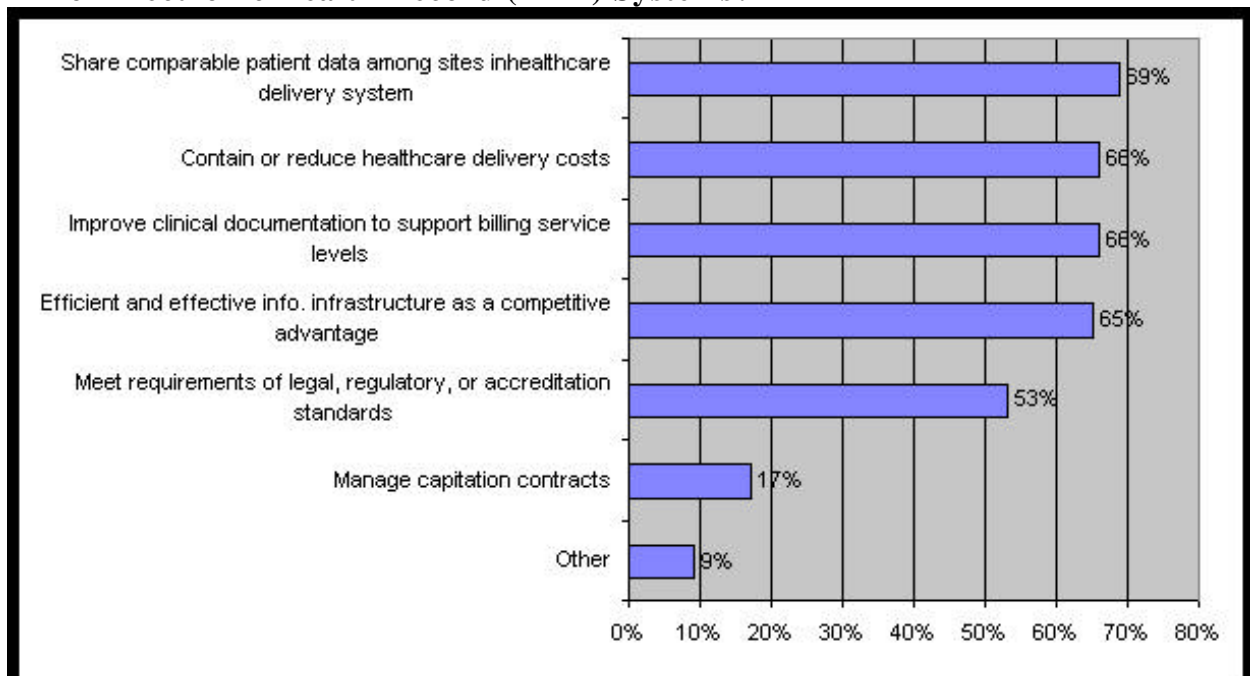
- Serving as a forum for sharing the knowledge, experience, and solutions of healthcare informatics leaders and vendors.
- Supporting, coordinating, and leading the process of creating healthcare information standards.
- Conducting surveys and studies related to selected EHR and standards issues.
- Assisting small EHR developers in finding alliances and partnerships.
- Acting as a voice of conscience on aspects of confidentiality, security, and social impact

The **Overview Version** of the survey includes the answers from 299 respondents who identified themselves as being exclusively from Provider, Integrated Delivery Networks or Managed Care Organizations. It includes questions that address:

- Management, Administrative, and Clinical Motivations Driving the Need for Electronic Health Record Systems
- EHR Applications and Functions Being Implemented
- Network Platforms Being Used to Support EHRs
- Web-based Applications Being Considered
- Major Barriers to EHRs and the User Strategies to Address Them
- EHR Migration and Implementation Plan
- Data Security Concerns and Implementation Plans

Excerpts are reproduced with permission below. Additional information can be found at the survey website: <http://www.medrecinst.com/resources/survey/2000/index.shtml>

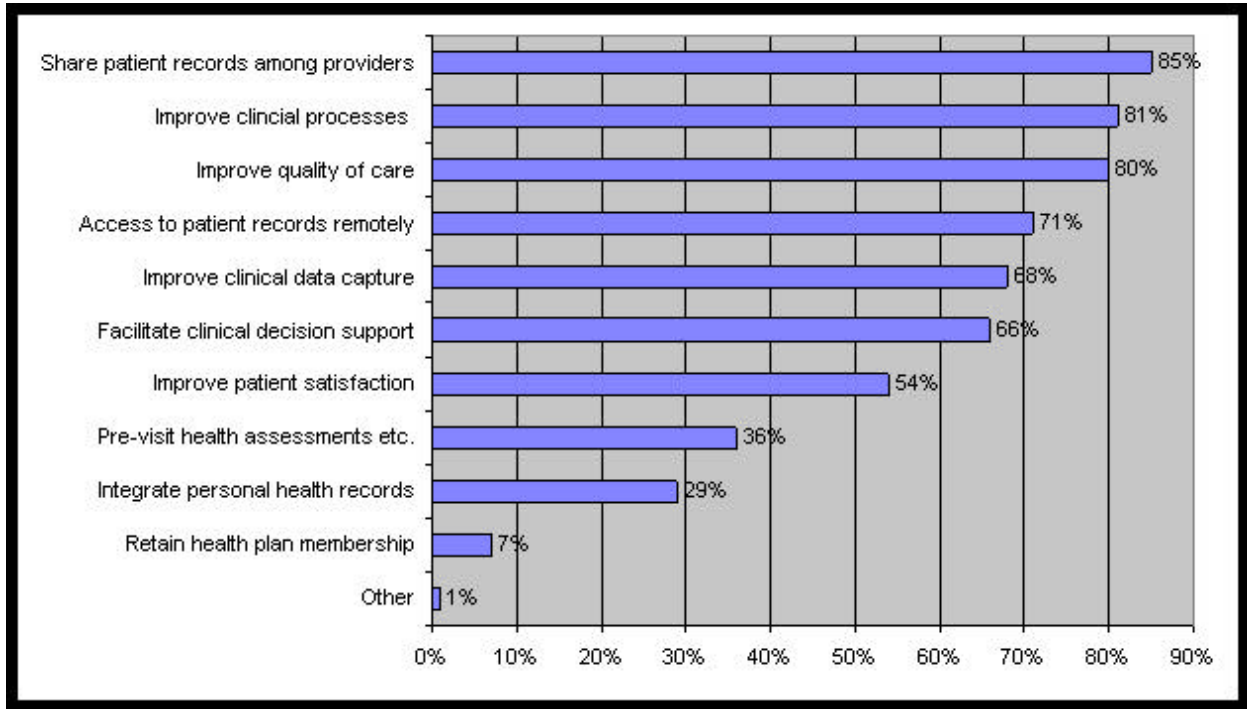
**1. What are the major management/administrative factors that are driving the need for Electronic Health Record (EHR) Systems?**



The need to share comparable patient data among different sites within a multi-entity healthcare delivery system	69%
The requirement to contain or reduce healthcare delivery costs	66%
The need to improve clinical documentation to support appropriate billing service levels	66%
The need to establish a more efficient and effective information infrastructure as a competitive advantage	65%
The need to meet the requirements of legal, regulatory, or accreditation standards	53%
The need to manage capitation contracts (global capitated contracts, specialty carve-outs, sub-capitation for Medications, Hospitalization, etc.)	17%
Other	9%

(298 Responses)

## 2. What are the major clinical factors that are driving the need for EHR Systems?



Improve the ability to share patient record information among healthcare providers	85%
Improve clinical processes or workflow efficiency	81%
Improve quality of care	80%
Provide access to patient records at remote locations	71%
Improve clinical data capture	68%
Facilitate clinical decision support	66%
Improve patient satisfaction	54%
Improve efficiency via pre-visit health assessments and post-visit patient education	36%
Support and integrate patient healthcare information from Web-based personal health records	29%
Retain health plan membership	7%
Other	1%

(296 Responses)

**3. What are the major barriers to your plans for implementing an EHR?**

Lack of adequate funding or resources	57%
Difficulty in justifying the investment in an EHR system	40%
Inability to find a vendor or technical solution that addresses the needs of my organization	36%
Difficulty in implementing an information solution in a rapidly changing environment	34%
Inadequate or incomplete healthcare information standards, data sets, or code sets	31%
Lack of nationally accepted guidelines and policies to protect the confidentiality of health records	28%
Difficulty in creating a migration plan from paper to electronic health records	27%
Lack of support by the medical staff	27%
Lack of consensus to commit to a specific vendor or technical solution	20%
Lack of support by the executive hierarchy	19%
Other	06%

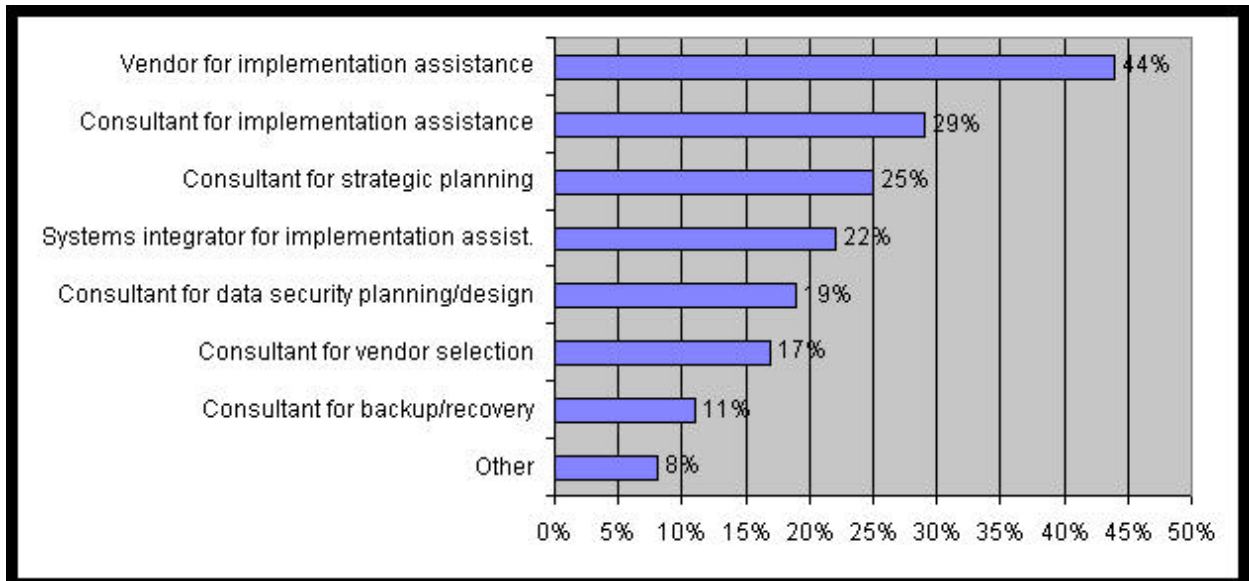
(286 Responses)

**4. What are the major strategies or approaches you plan to undertake to address these barriers?**

Educate or demonstrate the ability of an EHR to improve patient care and clinical processes	60%
Build consensus on an information system strategy, migration, or implementation plan	54%
Demonstrate the cost benefit of an EHR	44%
Solicit additional funds or resources	34%
Work with standards organizations or professional associations to improve standards, data sets, or code sets	25%
Build consensus to support a specific vendor or technical solution	21%
Other	7%

(277 Responses)

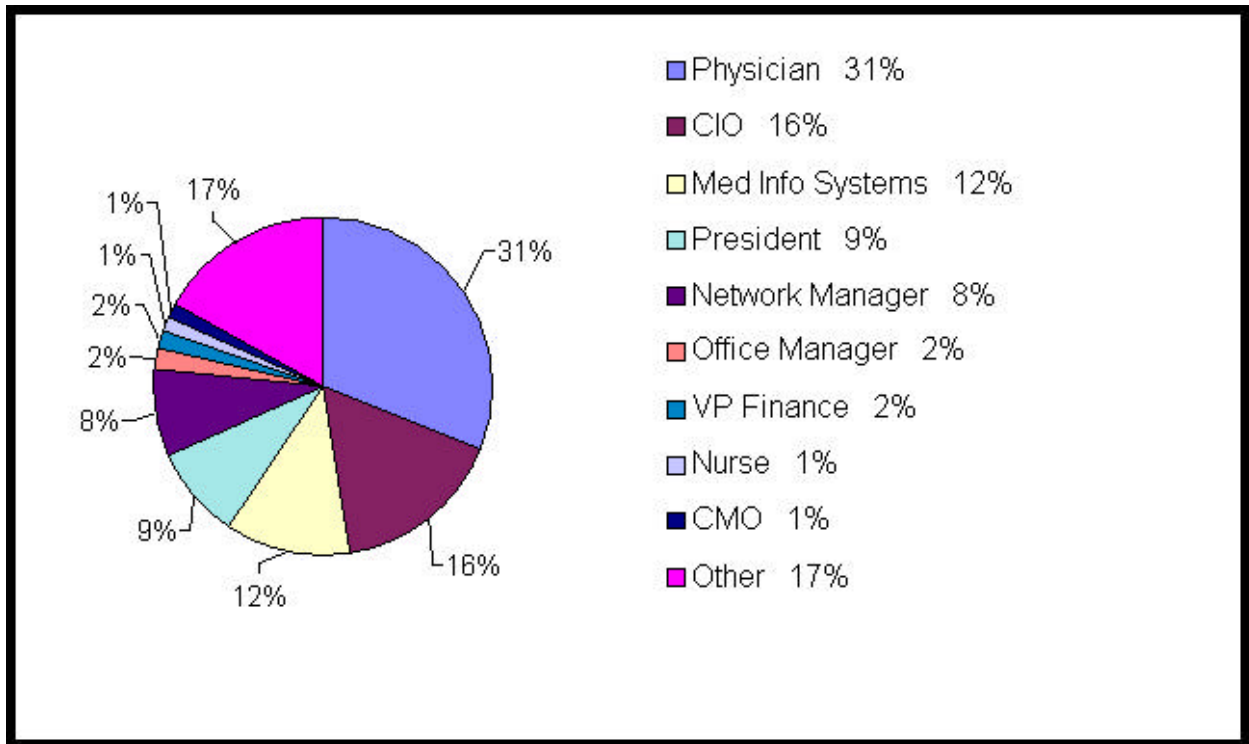
**5. What kind of outside assistance do you plan to use to help you implement or expand your EHR system?**



Vendor for implementation assistance	44%
Consultant for implementation assistance	29%
Consultant for strategic planning	25%
Systems integrator for implementation assistance	22%
Consultant for data security planning and design	19%
Consultant for vendor selection	17%
Consultant for backup and recovery	11%
Other	08%

(236 Responses)

**6. Which of the following best describes your role within your (healthcare provider) organization?**



Physician	31%
CIO	16%
Med Info Systems	12%
President	9%
Network Manager	8%
VP Finance	2%
Office manager	2%
Nurse	1%
CMO	1%
Other	17%

(299 Responses)

## PRODUCTS & REVIEWS

### College of American Pathologists' SNOMED® International Launches SNOMED® RT

May 9, 2000

#### Next-Generation Terminology Provides Vital Link in Electronic Health Record

SNOMED® International today officially launched the next generation of its clinical reference terminology to thousands of health care professionals participating in the TEPR 2000 (Toward an Electronic Patient Record) meeting at the Moscone Convention Center.

SNOMED® RT (Systematized Nomenclature of Medicine Reference Terminology) will facilitate the health care field's transition from paper records to electronic records and significantly improve patient safety and quality of care.

"Health records encoded with SNOMED RT can be seamlessly translated into electronic form, consolidating multiple paper records into an integrated whole," said John C. Neff, MD, FCAP, chair of the SNOMED International Authority. People have an average of 11.2 paper records, usually located in 10 different places, Dr. Neff added. "One electronic health record streamlines care management by consolidating a patient's x-rays, lab results, and medical history while providing a more accurate basis for researchers aggregating data."

According to last year's Institute of Medicine report, between 44,000 and 98,400 people die each year in the United States from medical errors - more than from highway accidents, breast cancer, or AIDS. The report adds, "Safety experts could prevent many injuries and deaths if they systematically collected and analyzed data on medical errors, to identify the causes." This is one of several areas in which SNOMED RT can play an important role. SNOMED RT creates consistent coding for clinical terms, concepts, and relationships.

Coded data can be systematically collected and shared by physicians across specialties, as well as by administrators and researchers for data collection and analysis, decision support, and outcomes management. This reduces the margin of error in the health care process - from prevention to diagnosis and treatment.

The Health Insurance Portability and Accountability Act (HIPAA), signed into U.S. law in 1996, requires a national standard for various types of electronic health communication, including patient records, by 2001. Compatible with HL7, X12, LOINC and DICOM Standards, SNOMED RT establishes the consistent clinical codes and universal terminology that health care systems, clinicians, administrators, and vendors need to comply with the HIPAA regulations.

Developed and managed by SNOMED International, a division of the College of American Pathologists (CAP), SNOMED RT is a concept-based reference terminology that makes health care knowledge more accessible and usable whenever and wherever it is needed. With its unprecedented breadth and scope, SNOMED RT revolutionizes the storage, retrieval and analysis of clinical data.

More than 121,000 concepts are linked to over 190,000 synonym terms, each with unique computer readable codes that reflect current clinical practices. An excess of 340,000 explicit relationships between terms enables users to retrieve a case based on a variety of criteria. For examples of these explicit relationships, log on to <http://www.snomed.org>.

The U.S. Government has identified SNOMED® as "the most comprehensive structured and controlled clinical terminology available in the English language," as cited in the March 7, 2000, Commerce Business Daily.

SNOMED RT is a vital link to a more longitudinal electronic health record, which is increasingly being employed by health care systems in the hospital, doctor's office, and the home. "The creation of an electronic health

record is one of the key issues in health care today; its implementation depends on a strong clinical terminology. SNOMED RT promises to be the right tool," said Peter Waegemann, executive director of the Medical Records Institute (<http://www.medrecinst.com>), which is sponsoring TEPR 2000.

Leading organizations in the health care industry and health information technology field - from health care systems and HMOs to software vendors and government agencies - are already using SNOMED.

SNOMED is currently used in more than 40 countries across five continents. The American National Standards Institute (ANSI), which is the U.S. representative for the International Standards Organization (ISO), recently recognized the College of American Pathologists as an accredited developer of standards. Anticipated recognition of the hierarchical terminology model of SNOMED RT, through the ANSI process, should continue to accelerate acceptance and use worldwide.

The College of American Pathologists is a medical society serving nearly 16,000 members and the laboratory community throughout the world. It is the world's largest medical society composed exclusively of pathologists and is widely considered the leader in laboratory quality assurance. The CAP is an advocate for high quality and cost-effective patient care and has committed more than \$17 million to the development of the SNOMED work. The College is located on the World Wide Web at <http://www.cap.org>.

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## INTERNET RESOURCES

### Online Continuing Medical Education List

From: Bernard Sklar, M.D., M.S.  
<[bersklar@netcantina.com](mailto:bersklar@netcantina.com)>

I have recently updated my list of online continuing medical education. It is posted at <http://www.netcantina.com/bernardsklar/cmelist.html>. There are now about 135 sites offering

about 3500 credit hours. Please contact me if you find any errors or have additions to the list.

### The Virtual Veterinary Center

<http://www-sci.lib.uci.edu/HSG/Vet.html>

Martindale's Health Sciences Guide - 2001. A potpourri of veterinary-related links and resources

## NEWS & COMMENTARY

### Web Users Search for Medical Advice Most Often

The Web is a vital source of medical information for American Internet users, although many users harbor privacy concerns over the storage of medical records on the Internet, according to a new report from the Pew Internet and American Life Project. The

report surveyed more than 12,000 people, determining that 52 million Americans have gone online to become more informed about medical problems. Roughly 55 percent of all Web users have gone online to seek out health-related information, making the activity more popular than online shopping or searching for sports scores and stock quotes, according to the report. Some 41 percent of those polled said

data found on the Internet helped inform their medical decisions, such as whether to see a doctor. Internet users are wary of placing their medical records online due to privacy concerns, with 63 percent of those surveyed saying they oppose the storage of medical records on the Web, even if the information is guarded by passwords. (Wall Street Journal, 27 November 2000)

### **IBM Joins University of Michigan to Prevent Medical Errors**

IBM is joining the University of Michigan Health System in support of a multi-year program intended to reduce medical error, which leads to as many as 100,000 deaths each year in the United States. Dubbed "The UMHS CareWeb Clinical System," the initiative will allow doctors, nurses, and other medical professionals to enter notations related to lab tests, procedures, and prescriptions into a program that will ensure uniform presentation of information. Unclear handwriting and mishandled notes are often blamed for medical errors. (Reuters, 8 December 2000)

## **MEETINGS & EDUCATIONAL OPPORTUNITIES**

### **Geographical Information Systems in Veterinary Science Conference**

11th - 13th September 2001 - Lancaster University

As you may have heard, Lancaster University is hosting a conference entitled GISVET: Geographical Information Systems in Veterinary Science, from 11th - 13th September 2001. The meeting is jointly organised with the Veterinary Laboratories Agency, Weybridge, England.

The conference takes the form of presentations from invited speakers, together with submitted papers. Most invited speakers have already been confirmed. We shall issue a call in January for offers of submitted papers and posters. The papers will be offered as a special issue of a leading journal. The invited presentations will be published separately, as an edited book.

In addition to the main conference programme, there will be optional workshops, both introductory and more advanced, on GIS and spatial statistics, with particular reference to problems in veterinary science. These will take place on 10th September (introductory) and 14th September (more advanced).

Lancaster University is in north-west England, about an hour's drive from Manchester Airport. It is close to areas of outstanding natural beauty. We have therefore arranged optional excursions to the Lake District in advance of the conference (9th September), and an afternoon excursion to the Yorkshire Dales on the afternoon of 13th September.

There will be an evening reception and welcome on 10th September, a display of posters and drinks reception on 11th September, and a conference dinner on 12th September.

This initial letter to you is to invite you to note the dates and to bookmark the following site, on which details of booking, the academic and social programme, and invitations to submit posters and papers will be available in January.

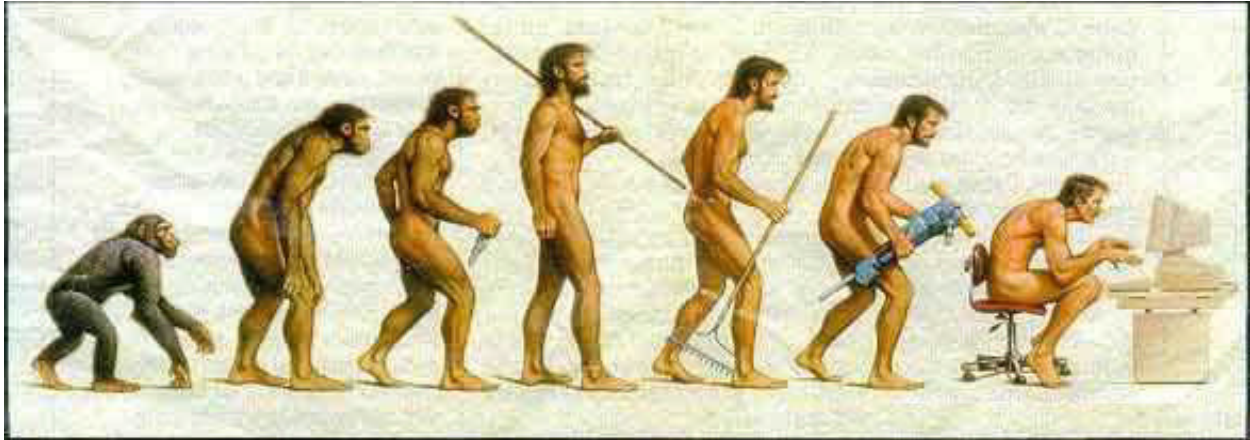
<http://www.lancs.ac.uk/depts/ihr/gisvet.htm>

The programme is being organised by Dr Peter Durr and Professor Tony Gatrell. The conference administrator is Ms Teresa Wisniewska ([t.wisniewska@lancaster.ac.uk](mailto:t.wisniewska@lancaster.ac.uk)).

# CLOSING BITS

## Evolution

<http://sendingfun.com/pictures/evolution/evolution.jpg>



## What Gender is a Computer?

Courtesy of: "Robin M. Starr" <[starrchi@earthlink.net](mailto:starrchi@earthlink.net)>

A language instructor was explaining to her class that French nouns, unlike their English counterparts, are grammatically designated as masculine or feminine. Things like "chalk" or "pencil," she described, would have a gender association - even though in English, these words were neutral. Puzzled, one student raised his hand and asked, "What gender is a computer?" The teacher wasn't certain, so divided the class into two groups and asked them to decide if a computer should be masculine or feminine. One group was composed of the women in the class, and the other, of men. Both groups were asked to give four reasons for their recommendation.

The group of women concluded that computers should be referred to in the masculine gender because:

1. In order to get their attention, you have to turn them on.
2. They have a lot of data but are still clueless.
3. They are supposed to help you solve your problems, but half the time they are the problem.
4. As soon as you commit to one, you realize that, if you had waited a little longer, you could have had a better model.

The men, on the other hand, decided that computers should definitely be referred to as the feminine gender because:

1. No one but their creator understands their internal logic.
2. The native language they use to communicate with other computers is incomprehensible to everyone else.
3. Even your smallest mistakes are stored in long-term memory for later retrieval.
4. As soon as you make a commitment to one, you find yourself spending half your paycheck on accessories for it.