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March - April, 1999

Newsletter

Robin Starr-Chichester (Conifer, CO) - President; James V. Schoster (Wisconsin) - President Elect, James T. Case (UC-Davis) - Secretary Treasurer; Ronald D. Smith (Illinois) - Newsletter Editor

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ASSOCIATION NEWS

AVI Nominations

The Association for Veterinary Informatics is now soliciting nominations from its membership for the offices of President-elect and Secretary-Treasurer. Any full member of the organization is eligible.

The Secretary-treasurer serves for three years and is responsible for the financial affairs of the Association. The secretary-treasurer is also responsible for management of the AVI membership, distribution of the paper version of the Association newsletter, distribution of annual ballots for election of officers and for all communication with the membership.

The President-elect serves for one year, during which time they are the program chair for the Richard Talbot Symposium. After the first year, the President-elect becomes President of the association for one year, during which they guide the direction of the organization in association with an executive board consisting of the Secretary-treasurer, newsletter editor, President-Elect and Immediate Past President. Following their one year term, the President serves a one year term as Immediate Past President, during which they serve as chair of the nominating committee.

To nominate individuals for these offices, please send their name and a brief statement in writing or by Email concerning their qualifications before May 31, 1999 to:

Dr. Charles A. Cohen
Chair, AVI Nominating Committee
214 Main Street
Branford, CT 06405
Email: 74232.41@compuserve.com

How to Contact AVI

Applications for membership, accompanied by a check for \$35 payable to the AVI, should be sent to:

Dr. James T. Case; Secretary Treasurer, AVI;
1590 Augusta Ct., Dixon, CA 95620
Phone: 916/752-4408; FAX: 916/752-5680; e-mail: JimCase@aol.com

Membership application forms are available online at:

<http://netvet.wustl.edu/avi.htm>

Dr. Case 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. Although the electronic version is only an ASCII (text) file, it's 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://netvet.wustl.edu/avi.htm>

CORRESPONDENCE

Question: Citations from the Web?

From: larry.paisley@vetinst.no
To: Multiple recipients of list <epivet-l@upei.ca>

Is there an acceptable (standard?) way to cite references posted on a website? For example, I am using the OIE, International Animal Health Code, 1998 edition, that is in web format for a

manuscript that I am preparing. The hard copy is available but I see no reason to obtain it when the information is at the address below.

http://www.oie.int/Norms/MCode/A_summry.htm

Response: Citations from the Web?

From: Theresa Bernardo <tbernard@cvm.msu.edu>
To: Multiple recipients of list <epivet-l@upei.ca>

You can find the essentials from the book "The Columbia Guide to Online Style" at:

http://www.columbia.edu/cu/cup/cgos/idx_basics.html

then select: Preparing the Bibliographic Material (to see examples of the basic formats)

VisuaLab for Veterinary Medicine



Introduction & Technical Overview

Craig N. Carter
Project Zebra Team Leader
Texas Veterinary Medical Diagnostic Laboratories
College Station, TX

Introduction:

The Texas Veterinary Medical Diagnostic Laboratories developed the VISTA mini-computer-based laboratory information management system (LIMS) in-house in the early eighties. This system is still in use and has served the labs well. However, about two years ago, we began to realize that in order to be able to take advantage of new IS technologies, we would have to make a transition to a contemporary software and hardware platform. As a result, the Department of Epidemiology & Informatics conducted a study to see what TVMDL's options are.

Not wanting to "reinvent the wheel", the first thing we did was investigate existing off-the-shelf systems which could potentially be implemented to replace VISTA. Our main criteria for the new system was that it must be built using mainstream graphical applications software tools, must be as user configurable as possible, must run on an Intel processor platform (preferably under Windows NT), and must provide maximum scalability. Almost 50 human LIMS systems and 2 veterinary LIMS were studied. None of the human systems could fulfill the needs of our laboratory. In addition, most of them were well outside of our budgetary limitations.

One of the veterinary LIMS (VET-LIMS) is written in a DOS version of Pascal, had limited functionality, and support. Nothing short of a total rewrite of this system would fulfill our criteria. The other veterinary LIMS (VADDS) appeared to be fully functional but is written in a Rockwell language known as Pro-IV which has a dubious future and, because of its esoteric nature, would be difficult to support. In addition, we were concerned about how it would behave in the Window's environment. Finally, the system was fairly expensive.

Just about the time we were making the decision to rewrite the VISTA system in-house, a human LIMS system for clinical pathology laboratories known as VisuaLab caught our attention. It is written in PowerBuilder and will run with any of the ODBC data base engines such as Oracle, Sybase, or SQL Server. Furthermore, it contained some of the user-configurability we were looking for. The system was written by Mark Smith, President of Aurora Systems of Dallas, TX, a former employee of Antrim Corp. which also markets LIMS to human laboratories.

In 1997, TVMDL purchased the source code of VisuaLab in order to develop a fully functional LIMS for single or multi-site veterinary laboratories. This effort has been coined Project Zebra for the following reasons:

- We wanted to create a system that would provide everything from A to Z(ebra) for veterinary diagnostic laboratories.
- We wanted to build a system that is lean and mean (like a Zebra), one that gives the users a great deal of independence (also like a Zebra!) to alter the look and feel of the system without technical assistance and to be able grow and adapt to new environments (a must for any animal in the jungle!).
- We wanted to build a system that takes full advantage of the graphical capabilities of the Window's operating system environment to provide a zippy (Zebras are fast!) and a flashy (Zebra stripes are unmistakable!), very functional interface.

TVMDL is reaching the end of the development cycle of VisuaLab for Veterinary Medicine and will implement their version of this system at the College Station and Amarillo labs over the next few months. After this conversion is complete, the poultry diagnostic labs in Center and Gonzales, Texas will also be linked into VisuaLab.

Since we are nearing completion of the system, Dr. Eugster thought it appropriate to invite other veterinary diagnostic laboratories to see where we are with Project Zebra. Apparently, many other veterinary labs are trying to make a decision about how to go forward with information systems technology, especially with the Year 2000 issue looming on the horizon. VisuaLab may be an option for your lab.

If another veterinary diagnostic lab decides to implement VisuaLab at their site, Aurora Systems will provide installation and optional maintenance support (with assistance from TVMDL). Of course, for those labs that can handle their own software maintenance, source code will be available.

Technical Overview:

Note: The following descriptions assume that the reader has taken the VisuaLab tour which is on the TVMDL web site at: WWW.TVMDL.TAMU.EDU This tour demonstrates how the system can be used to accession cases, order tests, and enter and review results. The rest of this document describes how VisuaLab can be configured by the user to meet specific, local laboratory needs. The screen shots of the VisuaLab tour on our web site have been included at the end in case you have no web access.

The TVMDL IS staff has been supporting an in-house written LIMS for over 15 years. During that time, we have learned that the only constant in diagnostic veterinary medicine is change. And the rate of change seems to be on the rise! With the old system, changes in data capture and reporting necessitated many hours of computer programming to keep the system operational and up-to-date. Because most veterinary diagnostic labs have limited IS resources, we felt that we would like to design enough flexibility into the new system that the user could design and implement data capture screens and report formats easily using simple graphical tools. We are excited to report that we feel we have accomplished that goal!

User-Defined Data Entry Screens using Components and Units

In VisuaLab, every diagnostic test is comprised of fundamental elements known as "components". For example, an ALT test or a total white blood cell count (WBC) are both components. A "unit", on the other hand, is a grouping that is made up of one or more components. Tests are ordered at the unit level. A unit could be a singular test like a toxicology assay or a panel of tests such as a chemistry panel or CBC.

Diagnostic laboratory data falls neatly into four basic classes: 1) numeric 2) domain (each entry is a valid member of a table, e.g. specimens, bacteria) 3) text (as in a short comment or result) 4) rich text (as in a necropsy, histopathology or cytology report where word processing capabilities are needed). In the accompanying screen shots for components, you will see the field labeled "Result Type". This is where the user defines the data class for the component.

The user also defines such things as a component name, a report name, the department defining the component, help text for the entry of the component, height and width for painting on the screen, an edit mask, default results, and the need for scroll bars. In addition, normal reference ranges can be defined for numeric class components.

Once the components are all defined, the user can group them into a functional test unit (see the screen shot labeled "Test Definition". A unit can contain any permutation of components with any data class, thereby allowing the user to design an infinite number of custom data capture screens. The attached screen shots demonstrate how components are used to build units.

The beautiful thing about this is that if a new test panel is added or an old one must be modified (e.g. adding, deleting, or resequencing components), this can be done on the fly by the user/technician without one line of programming code. Once saved, the new unit definition dynamically determines the way the data entry fields will be painted on the screen. Units are assigned version dates so that an updated unit doesn't adversely affect previously captured data. In addition, lab results can be entered singly or in a herd (spreadsheet) format by simply changing a drop-down listbox (see TVMDL web site VisuaLab tour at WWW.TVMDL.TAMU.EDU).

User-Defined Departmental Work-Lists

All veterinary diagnostic laboratories will likely have a different list of departments which can perform diagnostic tests. VisuaLab allows the user to define a domain of laboratory departments (e.g. bacteriology, histopathology, etc.) which fits a particular lab facility. The test units are then tied to a particular department when they are built (described in previous section). As tests are ordered, work-lists are dynamically constructed and managed for each department that is defined for VisuaLab. As results become available, are entered and released for cases, they disappear from the work-list.

The case coordinator has a specialized work-list which allows him/her to thoroughly review cases, make decisions about the delivery of preliminary reports and write conclusions and assign a diagnosis on cases that are complete. This work-list is also dynamic in that anytime a case has new results entered against it, that case pops up in the case coordinator's work-list. As soon as the case coordinator takes action on the case, it is deleted from that work-list.

User-Defined Case Reporting

If there's one thing unique about the way diagnostic laboratories manage their information, it's the format of the case report which goes out to the lab's clients. In addition, within labs the case report is always being updated to handle new tests and reporting requirements. VisuaLab has

been designed to allow the users and technicians design the case report themselves, freeing them from the need to depend on computer programmers for this task.

Defining the case report is done in a two-step process from the unit definition screen. First, the boilerplate text (headings, labels) is simply typed into a rich text object in the desired format. Next, the variable data items from the accession and results tables are selected and dropped onto the report form. Whenever a report is generated for on-line review or for printing, faxing, or emailing, the report definition for each unit is utilized to format the report. Site preferences allow the user to determine the order of the tests units by department and whether forward or reverse chronology is used.

VisuaLab "Internals" Screen Shot List

Figure	Description
1	Specimen component for bacteriology screen
2	Comment component for bacteriology screen
3	Unit definition for a bacteriology result
4	Date component for a necropsy screen
5	Rich text component for a necropsy screen
6	Unit definition for the necropsy screen
7	White blood cell component for a WBC screen with normals
8	Relative neutrophil component for a WBC screen with normals
9	Unit definition for the WBC screen
10	Lepto. pomona titer component for an abortion screen
11	Lepto pomona result component for an abortion screen
12	Unit definition for an abortion screen
13	Report definition for case demographics
14	Report definition for case demographics (continued)
15	Report definition for bacteriology results
16	Report definition for necropsy results
17	Report definition for abortion screen
18	Domain table management screen

VisuaLab Logon, Accessioning, Order Entry & Results Entry Screen Shot List

Figure	Description
1	VisuaLab logon screen
2	Accessioning menu
3	Blank accession screen (this will be customized by site)
4	Client search for accessioning
5	Spell checking for text fields
6	Case notes for internal use
7	Order entry selection
8	Order entry screen--drag and drop tests
9	Order entry screen

10	Results entry selection
11	Bacteriology example
12	Domain field example
13	Group (spreadsheet) results entry example, serology
14	Necropsy example--text entry
15	VisuaLab Case Explorer
16	Case review screen

All TVMA Vets On-Line in '99!!!

The Internet: The Last Step In The Empowerment Of The Practicing Veterinarian

Craig N. Carter, DVM PhD

*Chair, TVMA Committee on Informatics & Telecommunications
Moderator, TexVetMed*

Overview

According to a recent survey, 64% of physicians around the world are on the Internet. This is expected to rise to 78% by the year 2000 or shortly thereafter. In the U.S., the U.K. and Canada, over 75% of doctors are already actively utilizing the net. Virtually all these physicians have email capabilities. Furthermore, physicians are using the Internet most frequently to access information on diseases (95%), to read medical journals (86%) and to visit medical association sites (80%), while 45% used it to consult with colleagues. Finally, 30 million people in the U.S. are expected to use the Internet for health and medical content in the next two years.

By our best estimates, about 10% of veterinarians in Texas have email addresses and/or access to the Internet. The time has come for the veterinary profession to embrace this technology!

Internet Services For Veterinarians in Texas

If you haven't been on-line yet, then you are missing out on an entire world of useful services available for veterinarians. Your clients are there--why aren't you? What follows is an abbreviated list of some of the valuable resources you will be missing out on such as:

- Various TVMA electronic member services (WWW.TVMA.ORG).
- Veterinary bulletins from around the State (TexVetMed).
- Full-text, searchable veterinary journals and other electronic medical references.
- On-line consulting with veterinary colleagues and specialists (telemedicine).
- Electronic receipt (via email) of laboratory results.
- Paperless referrals.
- Meeting announcements with electronic registration.
- Electronic shopping for veterinary and pet products.
- Your own clinic web page offering valuable services for your clients.
- AVMA NOAH web page.

TVMA Web Page

On November 4, 1998, the TVMA Executive Board met on-line for the first time in an electronic meeting room at the TVMA Web site. The TVMA leadership realizes the power of the Internet and is utilizing it to do a better job for TVMA members!

The TVMA Web site has been under development for several years. This site is designed to provide a comprehensive set of services for TVMA members, ultimately becoming the electronic focal point of veterinary medicine in Texas. If you already have Web access, I invite you to visit the TVMA site located at WWW.TVMA.ORG. Some of the exciting things you will find there are as follows:

- TVMA electronic calendar of events including information about the Southwest International Veterinary Symposium and other upcoming veterinary meetings.
- Hot news stories regarding Texas veterinary medicine.
- Direct links to the TVMF, AVMA, Board of Veterinary Medical Examiners, VIN, Texas Animal Health Commission, TVMDL, Texas Association of Registered Veterinary Technicians, animal import regulations, veterinary practitioners reporting program, and other important veterinary sites.
- Government and legislative issues affecting Texas veterinarians.
- Veterinary classifieds (e.g. job openings, equipment/practice for sale).
- Electronic clinical rounds room.
- TVMA Committee electronic meeting rooms.
- Educational forums.
- How to sign up for the TexVetMed mailing list.

How do I get on-line?

To get on-line, all you need is a computer, a modem and an Internet account. Check your yellow pages for the Internet providers in your area or contact one of the national providers as follows:

- America On-Line, 1-800-540-9449
- Prodigy, 1-800-PRODIGY
- CompuServe, 1-800-739-6699

That's all there is to it--see you in cyberspace! And thanks in advance for getting "On-line in '99" where we can truly bring the Texas veterinary profession together once and for all!

PRODUCTS & REVIEWS

VETcalc Software \$99 with a 12 Month Guarantee

From: Robert Sprague
E-mail: vetcalc@consultant.com
Date: Sun, 14 Mar 1999

To: The Practice Owner,

Tired of trying to make heads & tails out of your end-of-month reports? In one hand, you have your practice management data and in the other, you have your bookkeeping records. Somewhere in between, there is vital practice information that you need to capture all your practice's Profit Dollars. Up until now, if you were not a trained managerial accountant, there

would be no way to bring all that data into one comprehensive review.

Finally, a 15 Minute practice management EOM review that will combine your practice management and bookkeeping data into one seamless "Profit Seeking" easy to read, simple to understand monthly practice management review.

A "Proven" 54 Pt End-of-Month Practice Management Review that will help you find, track, & capture up to an additional 50% in profit from your practice. Major Features include:

1. Productivity & Cost-Volume Analysis
2. Goal Setting w/ Alert Status Comparative Review
3. Allocation of Cost & Profit by Providers
4. What-If Analysis based upon any change[s] in Revenue, PtVolume,
5. Fixed Cost, Staff Labor Cost, and or Inventory Cost.
6. Reverse Profit Review
7. Unlimited Software Support

Data Entry is simple and is based upon EOM data already collected.

List Price for the VETcalc Practice Analysis program is 199.95 + SH.

Special Offer:

Reply today and ask how you can deduct \$100.00 off of the list price.

This Offer includes a 12 Month Money Back Guarantee.

For more information, please contact:

Robert Sprague
Veterinary Practice Management
13726 Penwith Ct Chantilly, VA 20151
VETcalc@Consultant.Com
800 410-0801

Experience Base of 350+ Practices

Requires Windows 3.x or Windows95/98
The VETcalc Program is Y2K Compliant.

CONSULTANT Wins the Euroscience Internet-Award

From: Th.A.M. Elsinghorst, Euroscience
<e-mail><Th.Elsinghorst@INTER.NL.NET>
Date: Tue, 10 Mar 1998

It is a pleasure for me to announce that prof. dr. M.E. White and co-workers of the College of Veterinary Medicine, Cornell University, Ithaca, New York, USA, have won the Euroscience Internet-award for their excellent homepage CONSULTANT.

CONSULTANT is a database to be used as a diagnostic support system. As the compilers said in the help-file: It is designed to provide assistance to trained veterinarians similar to that provided by a textbook or a diagnostic test; it can not and should not be used to make a diagnosis.

CONSULTANT contains about 7000 records (diagnoses). Each record consists of four fields:

1. DESCRIPTION. This field contains a description of the most relevant characteristics of the disease.
2. SPECIES. The following (group of) species are covered: birds, cat, cattle, dog, goat, horse, pig, and sheep.
3. SIGNS. This field contains a list of symptoms to be observed.
4. REFERENCES. This field contains the most relevant recent publications on the disease. Moreover, in many records this field includes links to PubMed (MEDLINE) and to web sites containing additional information on the disease described.

It is possible to search on diagnosis and on sign(s). Searching on sign(s), it is possible to compile a list of differential diagnoses. The search can be restricted to one of the animals mentioned in the SPECIES field, but it is also possible to search on all animals simultaneously.

CONSULTANT can be recommended, among others because of:

1. The large number of records (about 7000).

2. The excellent description of the diseases (short and to the point).
3. It is easy in use.
4. The relevant and up to date lists of references, including the links to PubMed and to websites containing additional information. These facilities make it very easy to surf on internet finding relevant veterinary information.
5. Updating, a problem of many homepages, is excellent, not only regarding the addition of new diagnoses, but also regarding the list of references of already present records.

There is only one minor point. In the help-file it is said that CONSULTANT contains about 4000 diagnoses. I assume that this statement is not updated correctly. As far as I know, the database contains much more records (about 7000).

The Euroscience Internet-award consists of:

1. Twenty copies of the "CATALOGUE OF THE JOURNALS INDEXED IN MEDLINE. Full title - abbreviated title - ISSN". This catalogue contains the mentioned data of the 3845 journals which are indexed in 1997 by the well-known American National Library of Medicine's database MEDLINE. The journals are abbreviated according to the "American National Standard for Information Sciences - Abbreviation of Titles of Publications, ANSI Z39.5-1985".
2. Twenty copies of the diskette edition of the catalogue including the Read Only Version of CardBox-Plus, a storage and retrieval program produced by Business Simulations Limited, England.

REMARK

The height of the award is associated with the size of Euroscience and not with the tremendous efforts to compile CONSULTANT!!!! It must have taken several years to compile such a database!!!! The award must be interpreted as an appreciation of the work of the compilers of CONSULTANT and as a stimulus to continue the efforts necessary for updating this excellent homepage. Moreover, it is hoped that the award stimulates compilers of other relevant veterinary web sites to add a link to CONSULTANT.

After visiting the homepage, I assume that you are enthusiastic about the CONSULTANT homepage as well.

The address of CONSULTANT is:

<http://www.vet.cornell.edu/consultant/consult.asp>

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E-mail: Th.Elsinghorst@inter.NL.net

Computer Program Aids Drug Development

CLEVELAND, Sept. 3 /PRNewswire/

A computer program developed by a chemistry professor at Case Western Reserve University can determine within minutes whether a new chemical presents a liability for cancer, birth defects, side effects, or environmental hazards.

The program, MCASE (Multi-Computer Automated Structure Evaluation), is a database of known toxic and carcinogenic chemical molecules. It is the creation of Gilles Klopman, CWRU's Charles F. Mabery Professor of Research in Chemistry.

MCASE organizes chemical information into categories, Klopman said. Chemists still have to create the chemical molecules, but can submit chemical structures to the program, which will evaluate the potential toxicity. MCASE is licensed through Multibase Inc. of Beachwood. The company entered a Cooperative Research and Development Agreement earlier this year to allow the Food and Drug Administration's Center for Drug Evaluation and Research to use MCASE.

The FDA will input information from its files on known toxins and make this information available to drug manufacturers through the software program. "The results (of the agreement) will give toxicologists an unparalleled decision support tool to aid and facilitate product development and regulatory

review processes," Klopman said.

Klopman formed Multicase with Herbert S. Rosenkranz, an adjunct professor of the School of Medicine and professor and chairman of the University of Pittsburgh's Department of Environmental Health. Klopman loaned MCASE to the FDA for a six-month trial period two years ago as the agency began to look for ways to computerize its information. The FDA has already entered information about carcinogens and birth defects. It provides information gathered from public and non-proprietary information in its files. As new information is entered, MCASE licensees will receive ongoing updates.

MCASE can help save billions of dollars in research costs. "It takes approximately \$2 million to test each chemical on rats," Klopman said. It also can help more drugs reach the public faster, as drug designers can target

chemical substances with promising outcomes or know the potential liabilities of others.

Certain drugs change their chemical structures over time, he noted. MCASE can assist in analyzing drugs' degradation products. It won't eliminate all animal testing, said Klopman, but it will prevent drug companies from testing chemical compounds which have been predicted to be harmful.

About 99.9 percent of the chemicals that go into drugs, pesticides, cosmetics, perfumes, and other products used by humans fail in laboratory tests, Klopman added. That can mean hundreds of rodent lives per test.

SOURCE Case Western Reserve University
CONTACT: Jeffrey Bendix of Case Western Reserve University
216-368-4440 / Web site:
<http://www.cwru.edu/>

INTERNET RESOURCES

Feline Health List

From: Janet Wickell <wickell@CITCOM.NET>

(Editor's note: I inserted this announcement as an example of why practitioners must be aware of the kind of unfiltered animal health information available to their clients.)

You are invited to join the Feline Health list, a safe haven for those of us who are interested in herbals, homeopathy, and other methods commonly referred to as "natural" or "alternative" rearing for our cats.

To join the list:

Message to: majordomo@MyList.net
message: subscribe feline-health, or subscribe feline-health-digest

Best Regards,
Janet Wickell

RENI - Registry Nomenclature Information System

From: Ken Boschert
ken@dcm.wustl.edu / WUVMD.WUSTL.EDU

Date: Thu, 19 Mar 1998

A website I recently viewed with several functions that may be of interest to those of you involved with toxicology, pathology, nomenclature, alternatives, etc.

See

http://www.ita.fhg.de/ita/reni/reniw_f0.htm

In the free part of the RENI web site you will have access to the complete nomenclature for rats and mice (accessible via organ systems, organs and lesions, the lexicon index and the update list) selected manuscripts with diagnostic criteria and some images for

1. Hyperplasia, pars distalis - Pituitary gland - Rat
2. Adenoma, pars distalis - Pituitary gland - Rat
3. Adenocarcinoma, pars distalis - Pituitary gland - Rat
4. Hyperplasia, tubular - Kidney - Rat
5. Adenoma - Kidney - Rat
Carcinoma - Kidney - Rat

1. Guidelines for organ sampling and trimming procedures for the pituitary gland and the kidney
2. More information on the pathology data bases RITA (Registry of Industrial Toxicology Animal-data) and NACAD (North American Control Animal Database)
3. Links to other web sites dealing with toxicological pathology

If you subscribe to RENI you will have access to all information, that is more than 550 manuscripts (including diagnostic criteria, literature references, and abstracts), more than 1200 images of histopathological slides, incidence data derived from the National Toxicology Program (NTP), and the complete set of guidelines for organ sampling and trimming procedures.

NEWS & COMMENTARY

DVM News Online March Update

From: Lynne Brakeman
<lbrakeman%ADVANSTAR.COM

We are pleased to inform you that the latest update of DVM News Online (<http://www.dvmnewsmagazine.com>) is now available.

Food Animal News Alert: Pseudorabies outbreak forces quarantine for Minnesota swine producers; USDA declares hog cholera emergency in the Carribean.

NEWS EXTRA: Read "Veterinary practice management software review," by Dr. Scott Sims, an equine practitioner in Novato, Calif. Dr. Sims evaluation, presented at the last AAEP meeting, covers features of 15 different software packages from 13 vendors. The

results are highly applicable to small animal and food animal practices, as well as equine practices.

Other updated pages for March include

1. New Products
2. Classified ads
3. New Links

We invite your list members to stop by and let us know what they think.

Sincerely,
Lynne Brakeman
Senior Editor
DVM Newsmagazine
E-mail: lbrakeman@advanstar.com

MEETINGS & EDUCATIONAL OPPORTUNITIES

See the informatics section of NetVet for a more complete and current list of informatics-related activities at:

<http://netvet.wustl.edu/info.htm>

American Medical Informatics Association (AMIA) 1999 Spring Congress

May 25-27, 1999; Chicago

<http://www.amia.org>

The theme for this year's Spring Congress is Health Informatics Education: Current Issues

and Future Prospects. Through a combination of invited panels and structured breakout discussions, the program will build understanding of the present needs in health informatics education, then outline goals and solutions to guide us into the next century, not only for career informaticians, but for tothers in ehealth care who will require a working knowledge of informatics.

Computers in Healthcare/Slice of Life/GRIPE

June 22-26, 1999; Philadelphia
See the Jan-Feb 99 AVI Newsletter for details.

Toward an Electronic Patient Record '99 (TEPR '99)

May 1-6, 1999; Orlando, Florida
See the Jan-Feb 99 AVI Newsletter for details.

Woods Hole Medical Informatics Overview Courses in Summer and Fall.

Applications are invited to attend a one-week overview course in medical Informatics held at the Marine Biological Laboratory in Woods Hole, Massachusetts. The course will be held twice in 1999 from May 30 to June 5 and from October 3 to 9. Each session is taught by an AMIA Bard member Daniel R. Masys, MD, for the first one; James Cimino, MD for the

October session. Each session is limited to 30 fellows; travel and course-related expenses are covered by the National Library of Medicine.

Questions related to course admissions should be directed to Ms. Carol Hamel, Missions Coordinator, Marine Biology Laboratory, (508)289-7401 or by e-mail to admissions@mbl.edu. A course outline and schedule can be found courtesy of Dr. Masys at

http://medicine.ucsd.edu/mbl_info

1999 Talbot Symposium

July 12-13, 1999; New Orleans

The 1999 Talbot Symposium schedule is available at...

<http://schoster.vetmed.wisc.edu/TalbotSchedule>

SUGGESTED READING

Artificial Intelligence in Medicine

From: newjour@ccat.sas.upenn.edu

<http://www.elsevier.com:80/inca/publications/store/5/0/5/6/2/7/>

This international journal publishes original articles from a wide variety of interdisciplinary perspectives concerning the theory and practice of medical artificial intelligence. Particular attention is given to:

1. AI-based clinical decision-making
2. medical knowledge engineering
3. knowledge-based systems in medical education and research
4. intelligent medical information systems
5. intelligent databases, books, and libraries
6. intelligent devices and instruments
7. medical AI tools
8. reasoning and metareasoning in medicine
9. methodological, philosophical, ethical and social issues of AI in medicine.
10. AIM features:
11. original contributions
12. tutorials
13. comments and discussions
14. reviews and bibliographies

15. current literature and events
16. medically relevant AI, software and hardware news.
17. letters to the Editor

Editor-in-Chief:

K.S. Sadegh-Zadeh, zadeh@uni-muenster.de
& zadeh@smi.stanford.edu

Computer Methods and Programs in Biomedicine

From: newjour@ccat.sas.upenn.edu

<http://www.elsevier.com:80/inca/publications/store/5/0/5/9/6/0/>

<http://www.elsevier.com/locate/cmpb>

AIMS AND SCOPE: To encourage the development of formal computing methods, and their application in biomedical research and medical practice, by illustration of fundamental principles in biomedical informatics research; to stimulate basic research into application software design; to report the state of research of biomedical information processing projects; to report new computer methodologies applied in biomedical areas; the eventual distribution of

demonstrable software to avoid duplication of effort; to provide a forum for discussion and improvement of existing software; to optimize contact between national organizations and regional user groups by promoting an international exchange of information on formal methods, standards and software in biomedicine.

Computer Methods and Programs in Biomedicine covers computing methodology and software systems derived from computing science for implementation in all aspects of biomedical research and medical practice. It is designed to serve: biochemists; biologists; geneticists; immunologists; neuroscientists; pharmacologists; toxicologists; clinicians; edipemiologists; psychiatrists; psychologists; cardiologists; chemists; (radio)physicists; computer scientists; programmers and systems analysts; biomedical, clinical, electrical and other engineers; teachers of medical informatics and users of educational software.

Full text articles in PDF format are freely accessible for subscribers to the printed edition.

AUDIENCE: Life-Science Researchers, Clinicians, Statisticians, Health Scientists, Computer Scientists, Programmers and Bioengineers engaged in applying and teaching biomedical information processing.

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The Chronicle of Higher Education

From: nj@ccat.sas.upenn.edu (News of New Electronic Journals)

<http://www.chronicle.com/>

This World-Wide Web site is a service of The Chronicle of Higher Education. Published weekly, The Chronicle is the No. 1 news source for college and university faculty

members and administrators. A subscription to The Chronicle includes free access to all of this Web site and to daily electronic-mail updates.

The Chronicle's services on the Internet include:

1. A daily briefing on developments in higher education, sent by e-mail, with full reports available on the Web site.
2. Reports on developments in information technology of interest to faculty members and administrators, including links to Internet resources for higher education.
3. Daily updates on grant opportunities.
4. The full text of the current issue of The Chronicle, available every Monday morning and fully searchable.
5. An archive of more than eight years of The Chronicle, fully searchable.
6. The job announcements from The Chronicle, available every Friday morning, before the printed newspaper is even mailed.

The above services are available to subscribers. Some parts of the site are free to all. They include:

1. Colloquy, an open forum on issues in higher education.
2. Job announcements from the previous issue of The Chronicle.

In addition, you will find that some articles, especially those about information technology, are free to non-subscribers.

To contact the Chronicle's editorial staff, surf to:

<http://www.chronicle.com/about-help.dir/edit/editstaff.htm>

To send electronic mail to the Chronicle, surf to:

<http://www.chronicle.com/about-help.dir/email.htm>

Medical Computing Today

From: nj@ccat.sas.upenn.edu (News of New Electronic Journals)

Date: Mon, 31 Aug 1998

<http://www.medicalcomputingtoday.com/>

Medical Computing Today (MCToday) is a computing and related technologies site created for physicians and other health care professionals. Our goal is to present information appropriate to all levels of computing expertise and for all types of academic and clinical practice, while setting high standards for content and the application of Web technology. Included is a combination of peer reviewed original articles, annotated references to Web resources, and exchanges on medical computing by and among health care professionals. All physicians and other health professionals with relevant experience or expertise are invited to contribute. The editorial content is and will remain free of special interest or commercial influences.

An archive of all past and present articles and features is available.

Published by Healthcare Computing Publications, Inc.

Contact: editor@medicalcomputingtoday.com

Informatics and Medical Computing News

From: nj@ccat.sas.upenn.edu (News of New Electronic Journals)

<http://gasnet.med.yale.edu/periodical/imcn/>

Informatics and Medical Computing News is edited by Eugene Worth, MD, a medical informatics consultant. This informative newsletter brings the clinician up to date in this rapidly changing area. Dr. Worth provides useful, practical, and cost-effective solutions to healthcare providers' information and computing needs.

Contact: eworth@tranquility.net

Virtual Medical Worlds Magazine

<http://www.hoise.com/vmw>

Virtual Medical Worlds Magazine includes articles on computers in medicine: telemedicine workstations, virtual autopsy trainers, genomic analysis, speech recognition products, auditory system simulation, talking Web browsers for the blind, new medical search engines, etc.

Contact: vmw@hoise.com

The Informatics Review

From: Sittig, Dean F., Ph.D.
<DSITTIG@PARTNERS.ORG>

Volume 2 Number 8 of The Informatics Review is now available at:

<http://www.informatics-review.com>

Articles reviewed include:

1. Using web technologies creates a seamless clinical information system
2. Patient tracking and outreach improves immunization coverage
3. An artificial neural network predicts intracranial hemorrhage in preterm neonates better than a logistic regression model
4. Identifying adverse drug reactions is difficult but informaticians can help

Dean F. Sittig, Ph.D.
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850 Boylston Rd, Suite 202
Chestnut Hill, MA 02467

CLOSING BITS

If A Car Was Like A Computer

At a recent COMDEX computer expo, Bill Gates reportedly compared the computer industry with the auto industry and stated "If GM had kept up with technology like the computer industry has, we would all be driving twenty-five dollar cars that got 1000 mi/gal." Recently General Motors addressed this comment by releasing the statement "Yes, but would you want your car to crash twice a day?"

And...

1. Every time they repainted the lines on the road you would have to buy a new car.
 2. Occasionally your car would die on the freeway for no reason, and you would just accept this, restart and drive on.
 3. Occasionally, executing a maneuver would cause your car to stop and fail and
- you would have to re-install the engine. For some strange reason, you would accept this too.
4. You could only have one person in the car at a time, unless you bought "Car95" or "CarNT". But, then you would have to buy more seats.
 5. Macintosh would make a car that was powered by the sun, was reliable, five times as fast, twice as easy to drive, but would only run on five percent of the roads.
 6. The Macintosh car owners would get expensive Microsoft upgrades to their cars, which would make their cars run much slower.
 7. The oil, gas and alternator warning lights would be replaced by a single "general car default" warning light.
 8. New seats would force everyone to have the same size butt.
 9. The airbag system would say "are you sure?" before going off.