the family next door™

THE WIDEST BED IN THE WORLD

Inside this Issue:
1. Membership Applications
2. AALAS Hotsheet
3. Nominations for annual AALAS Awards
4. AALAS Meeting Calendar
5. WBAALAS Annual Spring Trade Fair Announcement
6. Vendor Contacts
7. Job Opportunities
8. iiFARsighted Report
9. Interesting News
10. Five Great Life Lessons
2/2/00 - Three Rivers Branch Meeting - Mellon Institute (412)641-4051 Tony Battelli orrssiafb@mail.maggee.edu 

*2/3-6/00 - Southwest Intl' Vet Symposium - Fort Worth, TX (515)452-4224 TVMA or tvmategs@aol.com or www.tvma.org 

2/4-6/00 - Conference for Vets and Vet Techs - Knoxville, TN (423)974-7264 UTCVM 

2/5-9/00 - Miami Nature Biotechnology Symposium - Miami Beach, FL mbmbus-biochem@miami.edu or http://www.med.miami.edu/MNCWS 

2/6-9/00 - National Symposium on Biosafety - Atlanta, GA (207)490-1076 or eagleson@eagleson.org 

2/8/00 - Research Triangle Technician Presentation Night (919)513-6486 Donna Hardin or donna_hardin@ncsu.edu 

2/9/00 - Delaware Valley Branch Meeting - West Point, PA (215)652-6708 William Cole 


*2/17-19/00 - Ontario Vet Med Assoc - Ontario - Canada (905) 875-0756 OVMA or info@ovma.org 

2/17-19/00 - CARE Symposium (800)838-6738x5650 or ce4all@vetsmart.com or www.vetsmart.com 

2/18-21/00 - American Assoc for Advancement of Science - Washington, DC (202)326-6440 AAAS or media@aaas.org or http://www.aas.org/meetings/2000/index.htm 

2/20-24/00 Western Vet Conference - Las Vegas, NV (702)739-6698 Stephen Crane 

*2/24-27/00 - Midwest Veterinary Conference - Columbus, OH (614)486-7253 OVMA or ohiovma@ohiovma.org or www.ohiovma.org 

*2/27-3/3/00 - Annual New England Vet Meeting - Dixville Notch, NH (800)255-0600 Mike Lappin 

*3/5-3/7/00 - AAHA Technician Academy - Portland, OR (800)882-6301 AAHA3/5-7/00 - Western Poultry Disease Conference - Sacramento, CA bsmit@ucdavis.edu or http://www.cevs.ucdavis.edu/ces_pages/Conf.cfm?eventId=22 

*3/6-12/00 - Recombinant DNA Methodology - York, PA (800)407-6546 Coordinator or workshop@dndtech.com 

3/10/00 - Washington Branch AALAS annual Trade Show (206)616-4559 Tim Dawe 

3/10/00 - National Institute for Occupational Safety - Washington, DC (406)393-4403 Judy James 

*3/11-12/00 - Annual Feline Medicine Symposium - College Station, TX (409)845-9102 OVCE 

*3/11/00 - IACUC 101 - Boston, MA Joan Rachlin PRMR@aol.com http://www.aamc.org/research/primr/101\text{.htm}

3/11/00 - Arizona AALAS Board Meeting - Tucson, AZ (520)621-1330 Grace Aranda or garanda@u.arizona.edu or http://www.ahsc.arizona.edu/uac/aalas.html 

4/00 - Sand Diego Branch Seminar (619)450-5990x239 Gary Rodemeyer or gromemeyer@skcc.org 

*4/5/00 -- N Mountain Branch Meeting - Chazy, NY (518)846-6410 Cheryl Datkun or datkunc@war.wyeth.com 

4/6/00 - AMP Sabin Heroes of Science Awards - Washington, DC (703)836-9595x103 

4/27-28/00 - Good Lab Practice in Analytical Labs - PA (215)702-9394 Harvey Matheson or tbd4glp@aol.com or www.members.aol.com/tbd4glp 

4/30-31/00 - Achieving Competitive Edge with GLP - PA (215)702-9394 Harvey Matheson or tbd4glp@aol.com or www.members.aol.com/tbd4glp 

5/8-9/00 - Conflict Management in World of GLP -- Philadelphia (215)702-9394 Harvey Matheson or tbd4glp@aol.com or www.members.aol.com/tbd4glp 

5/10/00 - Delaware Valley Branch Meeting - West Point, PA (215)652-6708 William Cole 

5/14-16/00 - LAMA Annual Meeting - Portsmouth, NH (614)424-5093 Robyn Kiser or kiser@battelle.org 

*5/16/00 - N California Board Meeting - Chiron (408)773-1952 Ardis Roseberry or ardis@attglobal.net 

5/16/00 - New Jersey Meeting - TBA (908)777-6438 Shelia Husar 

5/17-18/00 - New England Spring Symposium - Marlboro, MA (617)235-6528 Carole Levin or carolelevin@aol.com 

5/18-19/00 - District 5 Annual Meeting - Oxford, OH (513)529-5435 Linda Zehler 

5/18-19/00 - Good Lab Practice in Analytical Labs - Orlando,FL (215)702-9394 Harvey Matheson or tbd4glp@aol.com or www.members.aol.com/tbd4glp 

5/18-19/00 - SCAW Spring Meeting - Baltimore, MD (301)345-3500 SCAW or info@scaw.com 

*5/21-24/00 - 2000 ACLAM Forum - Fort Myers, FL www.aclam.org 

5/23-25/00 - 37th Annual Upstate NY Symposium - Albany, NY (315)472-6616 Barb Bellernger 

5/26/00 - Arizona AALAS Board Meeting - Tucson, AZ (520)621-1330 Grace Aranda or garanda@u.arizona.edu or http://www.ahsc.arizona.edu/uac/aalas.html 

6/2-4/00 - N Rocky Mountain Branch Annual Science Meeting - Flathead Lake (406)994-6809 Leta Eng 

6/5-7/00 - Tribbranch 2000 Symposium - Philadelphia, PA (732)274-4250 Ron Bankrider or bankrider@war.wyeth.com 

*6/7/00 - N Mountain Branch Meeting - Univ of VT (518)846-6410 Cheryl Datkun or datkunc@war.wyeth.com 

*6/14-0/00 - N California Branch Education Symposium (510)704-0140 Daniel Micinio or daniell.micinio@covance.com 

6/14/00 - CRL Establishing & Maintaining Rodent Colonies - Andover MA (978)658-6000 Deb Curry or dcurry@crl.com 

6/19-23/00 - Charles River Labs Short Course - Andover MA (978)658-6000 Deb Curry or dcurry@crl.com 

6/25-28/00 - CALAS - Ottawa, Ontario (800)648-9569 Bob Boyington 

10/12-16/2003 - National AALAS Meeting - Seattle, WA (901)754-8620 AALAS 

2008 - District 8 Meeting - Washington Branch
Washington Branch of AALAS
Presents
The Spring Educational Trade Fair
Center for Urban Horticulture
3501 NE 41st Street, Seattle WA
March 10, 2000
Friday 9:00 AM- 1:30PM

Presentations, 8:30 – 11:30 coffee and pastries

Dr. Barbara Johnston
Animal Zoonoses

Doug Chinn
Advances in Cage Changing Stations

Dr. Dhillon
WSU Avian Health Lab

WABR
TBA

Dr. Randy Ridenour
What the USDA Looks for During Inspections

Officer Frazer Kennedy
Safeguarding Biomedical Research Facilities

Ardis Roseberry Video on implementing an enrichment program

Vendor’s TableTop Exhibits, Raffle and Lunch, 11:30-2:00

WBAALAS members: free
Non-members $10.00 (includes WBAALAS membership) We will bill at a later date.

Registration/Lunch Reservations

Name: ____________________________________________

WBAALAS member: Yes _______ No _______

Sally Varnam - Treasurer
Please fax by March 8th
Fax 206-768-5358 phone 206-764-2918
Email: varnam.sally_j@seattle.va.gov
AALAS's announces its newest member benefit: TechLink

One of AALAS's newest member benefits, TechLink is an electronic mailing list (listserv) created especially for animal care technicians in the field of laboratory animal science. TechLink serves as a method for AALAS technicians to exchange information and conduct discussions via e-mail messages with technicians in the U.S. and other countries around the world.

TechLink is a resource for technicians to use when they have questions or comments about: current topics/hot issues AALAS Certification or Registry environmental enrichment animal care or support issues job, education and/or relocation opportunities TechTalk articles AALAS educational programs etc., etc., etc.

TechLink is open to all AALAS National members, yet was created as a resource primarily for technicians.

1. To subscribe to the TechLink mailing list, send e-mail to LISTSERV@LISTSERV.AALAS.ORG with the BODY of the mail consisting of the following (the command MUST be in the BODY, NOT the subject): SUBSCRIBE TECHLINK Yourfirstname Yourlastname
   (Example) SUBscribe TECHLINK John Doe.
   You will receive a message acknowledging your subscription request. Upon review by the listowners, you will be added to the list and begin receiving messages.

2. Once on the TechLink list, simply send messages to techlink@listserv.aalas.org
Animal/Research Technician Position

NeoRx Corporation is a biotechnology company developing targeted biopharmaceuticals that detect and treat human diseases with an initial focus on cancer. We currently have an opening for a full-time animal/research technician position.

Responsibilities include husbandry of mice, rats and guinea pigs, cleaning cages, assisting in research protocols which includes weighing tissues, performing common animal procedures such as injections, and some computer entry.

Candidates should have 2yrs experience in the lab animal husbandry field. We prefer to have AALAS certification. Reliable, dependable, self-motivated, detail oriented, team player personalities are a must. We will train research skills.

We offer competitive salary, education and benefits package. For consideration, please send your resume to Gina Desfaches, NeoRx Corporation, 410 W. Harrison St, Seattle WA 98119. FAX 206-298-9442. Email gdbeschelles@neorx.com

The Revised ALAT Training Manual Is Now Available from AALAS!

This new and improved version of the manual has:
• All common laboratory animal species in one manual;
• Updated species information
• More user-friendly format; featuring information more specific to the ALAT certification level;
• Many more definitions;
• Expanded glossary and index;
• More pictures;
• Expanded appendix featuring tables for acronyms, abbreviations, and species-specific data.

To order your manual today, call AALAS at 901-754-8620

Only $35

20% discount on orders of 15 or more!
Date: Thu, 24 Feb 2000 15:19:44 -0600
From: "Traxel, Katie" <katie.traxel@abbott.com>
Subject: ALL Expense Paid Trip to Memphis, TN

Yes, that's right. if you fit one of the needed categories, you may be eligible to be selected for an all expenses paid trip to Memphis and given an opportunity to work with some of the hardest working people in the business.

Let me elaborate:

The CRB committee of AALAS (formerly known as the ATCH) is undertaking a job analysis this year for all levels of certification. This analysis will give us an accurate picture of the current tasks performed by ALAT, LAT and LATG certified people and allow us to adjust the exams accordingly. This process requires volunteers who are currently working at every level of certification to participate as subject matter experts. Previous appeals to various groups have helped immensely in finding volunteers, but we are still short some key people. We are currently recruiting volunteers for selected activities at certain levels of certification in specific job environments.

Specifically, we need:

1. A certified ALAT working in a government or VA facility who is willing and able to travel to Memphis to meet on March 17th & 18th
2. A certified LAT working in a government or VA facility who is willing and able to travel to Memphis to meet on March 17th & 18th
3. A certified LAT working in the commercial area (not pharmaceutical or biotech but rather sales, service or manufacture or animal supplier) who is willing and able to travel to Memphis to meet on March 17th and 18th.
4. A certified ALAT working in a government or VA facility who is willing and able to travel to Memphis to meet on August 18-19th.
5. A certified ALAT working in the commercial area (not pharmaceutical or biotech but rather sales or manufacture or animal supplier) who is willing and able to travel to Memphis to meet on August 18-19th.

If you are unwilling or unable to travel to Memphis, but want to help out anyway, we also need volunteers to participate in a pilot study in April in the following groups:

6. A certified ALAT working in a government or VA facility.
7. A certified ALAT working in the commercial area (not pharmaceutical or biotech but rather sales or manufacture or animal supplier).

Thanks to everyone who has volunteered to date. You will be contacted if you were chosen. If you haven't volunteered so far but would be willing to help out in one of the areas above, please email me directly at:

katie.traxel@abbott.com

tell me which of the above numbered vacancy you're able and willing to fill. a phone number I can reach you at and an email address if you have one. If you know someone, not on Com piled, who could help out, feel free to pass this on to them. For budget reasons, I'm afraid we won't be able to accept volunteers from outside the continental U.S. If you have any questions, give me a call at (247) 998-1100

Thanks.

Katie Traxel - Chair, Job Analysis Subcommittee, ATCB (CRB) Abbott Labs
katie.traxel@abbott.com
Of Mice, Men and Worms: biomedical breakthroughs trace the circle of life

In 1998, biotechnology brought some of science's most significant advances. The following are excerpts from a feature article by USA Today's Tim Friend, looking at some of the breakthroughs that, taken together, have broad implications for people's lives in the near future.

1998 was a banner year for biomedical science. Researchers grew human embryo stem cells in the lab, figured out how to achieve immortality in human cells, cloned mice and sequenced a worm. Although these may appear to be diverse discoveries, each is intimately linked with the other and combined they will have an important influence on most people's lives in the coming millennium.

Anti-aging fluid
January 1998 rang in the year with the announcement that scientists had learned to control the aging of normal human cells and to extend the cells' life spans in a test tube. The discovery had important implications for basic science for understanding aging and for new cancer therapies.

Indeed, cancer cells which have learned the secrets of immortality on their own, provided a key clue to finding this cellular fountain of youth—an enzyme called telomerase.

Woodring Wright and Jerry Shay at the University of Texas Southwestern Medical Center in Dallas, and scientists at Geron Corp., in Menlo Park, Calif., figured out how to get healthy human cells to do the same thing.

Stem cells isolated
The telomerase finding played a second key role in last year's scientific drama. On Nov. 6, James Thompson and colleagues at the University of Wisconsin reported in Science that they had isolated a rare type of cell called the undifferentiated human embryonic stem cell and grew it in large numbers in the laboratory.

Growing undifferentiated human embryonic stem cells has major implications for repairing or regenerating diseased organs in the human body and restoring their functions.

Embryonic cells are important because they are endowed with the unique quality of not yet having a destiny. They are cells still waiting for the mysterious developmental signal that will send them down the path to becoming a blood cell, liver cell, heart cell or brain cell, for example.

Telomerase, which allowed the other group to keep human cells alive indefinitely, provided that technical breakthrough.

Once that code is broken, Thompson says, it may be possible to direct the embryonic stem cells down any desired path and then cultivate a large supply for transplanting into the body to replace dysfunctional cells for diseases such as insulin-dependent diabetes, Parkinson's disease or leukemia.

Mouse cloned
Cloning of a mouse for the first time, reported July 23 in Nature is speeding dysfunctional cell replacement. The technique used to clone the mouse—actually 50 mice—offers one of the best methods of studying the dialogue that takes place between the surrounding fluid of the cell just before it divides.

To clone the mouse, Ryozo Yanagimachi at the University of Hawaii in Honolulu injected only the adult nucleus of a donor cell into an egg that had its nucleus removed. The donor nucleus and the egg cytoplasm could talk one-on-one with clearer communication. For cloning, that results in a higher rate of normal embryos.

But this also has important ramifications for learning about the signals needed to guide undifferentiated stem cells down a selected path.

Mapping a worm
Recently, scientists announced they had determined the first complete genetic blueprint of a multicellular animal. That blueprint of a tiny worm called Caenorhabditis elegans will reveal many vital clues about gene function in humans, including those that direct development. Just as humans do, the worm has organs, a nervous system and skin.

On Dec. 11, two teams working on the Human Genome Project announced in Science that they had completed the genetic blueprint, which contains the identities and genetic code of the organism's 19,099 genes. The worm shares 40 percent of its genes with humans and many of those will be found to determine the path that an undifferentiated stem cell will take. Scientists already are comparing human and worm genes to gain insights.
Thanks to ‘Babe’ no kid will eat a ham sandwich today

The following article by Patricia Pearson appeared in USA Today, December 1998.

One of the more puzzling facets of modern parenting is the tendency to foster animal love in young children and then make them eat those animals for lunch.

"Mooooo," my two-year-old shouts ecstatically as we approach the zoo each weekend since cows are the toddler equivalent of rock stars. She watches them adoringly; she reads about them reverently in "Big Red Barn" and "Good Night Moon." Then she eats a processed dead one on a bun, while her parents engage in a neat trick of cognitive dissociation.

Humans have always deprecated animals, of course. But, until recently, there has been a more coherent cultural meaning to the human-animal relationship. Children have been taught to revere certain creatures because they provide food, not in spite of it.

Or, there have been cultures without penchant for sentiment, who didn’t (and don’t) prod children to fall in love with edible animals in the first place.

The quandary of disconnected meaning— "see how cute the pig is? Now stick him on your fork"—arises full-force with the release of "Babe: Pig in the City."

Like the 1995 original, the sequel puts one of our most popular groceries squarely at the center of a heroic fable, in which children identify a plucky, kind-hearted creature who hopes to surmount his fated destiny as a slice of bacon. How does he do it? By proving his intelligence to humans (a point that pigs have been trying to make for millennia).

As narrative, "Babe" is quite different from the traditional fairy-tale "Three Little Pigs," in which the pigs are chased about by an evil wolf and emerge victorious. Legendary psychologists Karen Horney and Bruno Bettelheim have both pointed out that animals in traditional fairy stories are the symbolic embodiments of children's emotions. Their function is archetypical. The wolf is a projection of the child's rage, rather than an actual wolf.

HUMankind isn’t pitted against the animal world in fairy tales in the literal fashion of modern Hollywood movies. There is no evil butcher in the Brother Grimm, certainly not one operating in a slaughterhouse that would be tangibly familiar to a child.

Children have not been asked to identify with animals at the expense of identifying with their own species.

Hollywood, however, is increasingly crossing over from symbolic to literal terrain, with onerous implications for parents. Acts of anthropomorphism that foster sentimentality, drawing children to the box office with puppies and fawns and lion cubs, are reconcilable to the degree that we don’t eat pets and wild animals. But "Babe?" Uh-oh...

Although the original "Babe" made allusions to livestock fate—"Christmas is carnage!" the duck wailed at one point—"Pig in the City" is a veritable ode to animal rights.

The farmer's wife is "a serial killer." "Babe" is "a lousy pork chop." Chimps are dressed as exploited prostitutes; stray dogs are starved and molested; the duck is shot at on a firing range; animals are caged in a scientific laboratory by white-coated technicians.

---

Total Budget of Leading Animal Rights Organizations Compared to Leading State and National Biomedical Research Groups

<table>
<thead>
<tr>
<th>Animal Rights Organization</th>
<th>Budget</th>
<th>Pro-Research Organization</th>
<th>Budget</th>
</tr>
</thead>
<tbody>
<tr>
<td>Humane Society of the United States</td>
<td>$39,492,711</td>
<td>Mass. Society for Medical Research</td>
<td>$397,000</td>
</tr>
<tr>
<td>Mass. SPCA</td>
<td>$27,044,146</td>
<td>Conn. United for Research Excellence</td>
<td>$458,000</td>
</tr>
<tr>
<td>American SPCA</td>
<td>$21,385,845</td>
<td>Ohio Scientific Edu. &amp; Research Assoc.</td>
<td>$115,000</td>
</tr>
<tr>
<td>Int'l Fund for Animal Welfare</td>
<td>$10,781,548</td>
<td>Calif. Biomedical Research Assoc.</td>
<td>$337,000</td>
</tr>
<tr>
<td>ETP</td>
<td>$10,681,269</td>
<td>N.I. Assoc. For Biomedical Research</td>
<td>$190,000</td>
</tr>
<tr>
<td>World Society for Protection for Animals</td>
<td>$7,393,245</td>
<td>Pa. Society for Biomedical Research</td>
<td>$163,000</td>
</tr>
<tr>
<td>Friends of Animals</td>
<td>$5,082,987</td>
<td>Americans for Medical Progress</td>
<td>$517,000</td>
</tr>
<tr>
<td>Fund for Animals</td>
<td>$4,330,984</td>
<td>Foundation for Biomedical Research</td>
<td>$738,000</td>
</tr>
<tr>
<td>Animal League</td>
<td>$2,057,836</td>
<td>NCABR</td>
<td>$368,000</td>
</tr>
<tr>
<td>Defense Fund</td>
<td>$1,319,647</td>
<td>iiFAR</td>
<td>$105,145</td>
</tr>
<tr>
<td>Phys. Comm. For Respon. Med.</td>
<td>$1,712,875</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nat. AV Society</td>
<td>$1,646,743</td>
<td></td>
<td></td>
</tr>
<tr>
<td>In Defense of Animals</td>
<td>$1,613,605</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Animal Protection Institute</td>
<td>$1,319,647</td>
<td></td>
<td></td>
</tr>
<tr>
<td>American AV Society</td>
<td>$1,049,252</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Progressive Animal Welfare Society</td>
<td>$1,738,922</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Heroes of Medicine

At one point, jack-booted members of the Humane Society storm a hotel where the animals have taken refuge. The mirthless humans haul chimp babies off, drag screaming cats out from under beds and manhandle frightened dogs, all in unmistakable—and allegedly outrageouss—reference to the Gestapo clearing the Warsaw ghetto.

How exactly, a child can emerge from "Babe: Pig in the City" to eat a ham sandwich without blowing a gasket is beyond my guessing. He/she has not been told a symbolic story, but an expressly political one, in which the human family to which the child belongs is comprised of cruel or neglecting taskmasters.

If "Babe: Pig in the City" continues to bomb at the box office, it may be because parents aren't prepared to indoctrinate their children with this message. Certainly not till they give up the Christmas ham.

The spread of the anti-animal research, pro-animal rights message, of course, extends well beyond the complicity of some Hollywood movie makers who produce films such as "Babe in the City." The fundraising machine of the animal rights movement continues to draw heavy support for its strident campaigns against animal research as illustrated in the chart on page 2.

As noted in a recent issue of the North Carolina Association for Biomedical Research's newsletter, the total amount of the leading animal rights organization listed in the chart on page 2—$28,174,000—with that of the leading state and national biomedical research groups—$4,098,000—which are working full time to improve public understanding of responsible animal research, you'll see the activists outspend the advocates 7-to-1. NCABR says "our hats are off to all the pro-research groups who do so much with so little." iiFAR applauds the effort, as well.

Time Inc. produced a special issue titled Heroes of Medicine which features a look at some of history's great contributors to the history of medicine. An excerpt follows.

... The force that leads men and women to devote their lives to those who need help is their simple realization that, for them personally, there is no choice. More than a career, this has been their calling.

No matter what other goals it may achieve, the medical profession has always maintained as its ultimate mission the relief of human suffering... constant mindfulness that individual people are enduring the effects of disease and that only through the intervention of others can their problems be addressed.

Circa 400 B.C. Greek physician Hippocrates founded a tradition of medicine emphasizing clinical observation and ethics. Doctors still take the Hippocratic Oath which embodies that tradition.

Circa A.D. 170 Galen, a Greek physician in the Roman Empire, uses pulse taking as a diagnostic aid; his studies in physiology and anatomy remain widely influential until the 1500s.

1268 Roger Bacon, a British scientist and philosopher, publishes a treatise on how sight can be improved by using eyeglasses, which are already being worn in Europe and China.

1628 British physician William Harvey publishes On the Movement of the Heart and Blood in Animals, an accurate explanation of how blood circulates in the body.

1796 British doctor Edward Jenner administers the first effective vaccination against smallpox; within 30 years his treatment is practiced throughout the world.

1846 U.S. dentist William Morton gives the first demonstration of the effective use of ether as an anesthetic; the operation—for the removal of a neck tumor—lasts 25 minutes.

1854 British philanthropist Florence Nightingale tends the wounded during the Crimean War, applying revolutionary nursing practices; she later establishes a model school of nursing.

1858 German pathologist Rudolf Virchow publishes Cellular Pathology, in which he elaborates on his dis-
Continued from previous page

covered by that disease—and even life itself—occurs at a cellular level.

1862 French chemist and microbiologist Louis Pasteur publishes his findings on how germs cause disease, which he later uses to develop the pasteurization process.

1866 Austrian botanist and monk Gregor Mendel proposes basic laws of heredity in *Experiments with Plant Hybrids*, a statistical analysis of his crossbreed work on pea plants.

1867 British surgeon Joseph Lister reports his findings on how potentially deadly infections can be prevented by antiseptic operating procedures and treatment of wounds.

1895 German physicist Wilhelm Roentgen discovers invisible electromagnetic rays, which he calls X-rays; they are used to create diagnostic images of structures within the body.

1897 Felix Hoffman, a German chemist synthesizes a form of acetylsalicylic acid that enables mass production of aspirin; it becomes the best-selling drug for pain and inflammation.

1900 Austrian pathologist and immunologist Karl Landsteiner discovers the major blood groups, A, B, and O, and works out a blood-typing system that allows safe transfusions.

1910 German bacteriologist Paul Ehlich develops a cure for syphilis by administering a form of arsenic; the procedure establishes a modern chemotherapy—the use of selectively toxic drugs to treat disease.

1921 Canadian surgeon Frederick Banting and colleagues isolate insulin from the pancreas; within a few years, it is commercially produced for insulin-deficient diabetics.

1926 British bacteriologist Alexander Fleming identifies the bacteriakilling properties of penicillin, the first safe, successful antibiotic; in the 1940s, it is refined and widely used to cure infectious diseases.

1928 Greek-American pathologist George Papanicolaou develops the Pap smear test, making possible the early detection of cancer in the female reproductive tract.

1930 U.S. surgeon Charles Drew describes the long-term storage properties of blood plasma, which often can be used in place of whole blood to transfuse wounded or burned patients.

1943 Dutch physician Willem Koiff develops the first dialysis machine to perform the kidney’s blood-cleansing functions; it is often used before or after a kidney transplant.

1953 American biochemist and geneticist James Watson, and British biophysicist Francis Crick decipher the structure of DNA, the molecule that carries the genetic code.

1956 U.S. biologist Gregory Pincus reports on the first successful trials of a birth-control pill which he developed at the urging of social activist Margaret Sanger.

1964 Using his discovery of beta blockers, British pharmacologist James Black produces a heart-disease drug that can prevent hormones from triggering undesirable reactions.

1967 British physician Cicely Saunders establishes St. Christopher’s, the first modern hospice, in London; she also pioneers aggressive pain management for the terminally ill.

1982 U.S. patient Barney Clark is the first to receive a permanent artificial heart; he survives 112 days after the surgery, providing valuable information about his reaction to the device.

1984 U.S. surgeon Leonard Bailey performs the first transplant of an animal heart to a human; the patient, a baby, receives a baboon’s heart, but a mismatch of blood types proves fatal.

1985 Robert Gallo, of the U.S. National Cancer Institute, and Luc Montagnier, of France’s Pasteur Institute, each publish the genetic sequence of the AIDS virus they have identified; their findings turn out to be identical.

1990 U.S. geneticist W. French Anderson performs the first gene therapy on a human injecting engineered genes into a four-year-old to repair her faulty immune system.
The Payoff

A look at the Nobel Prizes for medicine awarded from 1901 to present show that animal research played a key role in these important discoveries. Animal research must continue for the future advancement of medical science.

<table>
<thead>
<tr>
<th>Year</th>
<th>Scientists</th>
<th>Animals Used</th>
<th>Contribution Made</th>
</tr>
</thead>
<tbody>
<tr>
<td>1901</td>
<td>von Behring</td>
<td>Guinea pig</td>
<td>Development of diphtheria antiserum</td>
</tr>
<tr>
<td>1902</td>
<td>Ross</td>
<td>Pigeon</td>
<td>Understanding of malaria life cycle</td>
</tr>
<tr>
<td>1904</td>
<td>Pavlov</td>
<td>Dog</td>
<td>Animal responses to various stimuli</td>
</tr>
<tr>
<td>1905</td>
<td>Koch</td>
<td>Cow, sheep</td>
<td>Studies of pathogenesis of tuberculosis</td>
</tr>
<tr>
<td>1906</td>
<td>Golgi, Cajal</td>
<td>Dog, horse</td>
<td>Characterization of the central nervous system</td>
</tr>
<tr>
<td>1907</td>
<td>Laveran</td>
<td>Bird</td>
<td>Role of protozoa as cause of disease</td>
</tr>
<tr>
<td>1908</td>
<td>Metchnikov, Ehrlich</td>
<td>Bird, fish, guinea pig</td>
<td>Immune reactions of functions of phagocytes</td>
</tr>
<tr>
<td>1910</td>
<td>Kessel</td>
<td>Bird</td>
<td>Knowledge of cell chemistry through work on proteins including nuclear substances</td>
</tr>
<tr>
<td>1912</td>
<td>Carrel</td>
<td>Dog</td>
<td>Surgical advances in the suture and grafting of blood vessels</td>
</tr>
<tr>
<td>1913</td>
<td>Richet</td>
<td>Dog, rabbit</td>
<td>Mechanisms of anaphylaxis</td>
</tr>
<tr>
<td>1919</td>
<td>Bordet</td>
<td>Guinea pig, horse, rabbit</td>
<td>Mechanisms of immunity</td>
</tr>
<tr>
<td>1920</td>
<td>Krogh</td>
<td>Frog</td>
<td>Discovery of capillary motor regulating system</td>
</tr>
<tr>
<td>1922</td>
<td>Hill</td>
<td>Frog</td>
<td>Consumption of oxygen and lactic acid metabolism in muscle</td>
</tr>
<tr>
<td>1923</td>
<td>Banting, Macleod</td>
<td>Dog, rabbit, fish</td>
<td>Discovery of insulin and mechanism of metabolism</td>
</tr>
<tr>
<td>1924</td>
<td>Einthoven</td>
<td>Dog</td>
<td>Mechanism of the electrocardiograph</td>
</tr>
<tr>
<td>1928</td>
<td>Nicole</td>
<td>Monkey, pig, rat, mouse</td>
<td>Pathogenesis of typhus</td>
</tr>
<tr>
<td>1929</td>
<td>Kijkman, Hopkins</td>
<td>Chicken</td>
<td>Discovery of antineuritic and growth stimulating vitamins</td>
</tr>
<tr>
<td>1932</td>
<td>Sherrington, Adrian</td>
<td>Dog, cat</td>
<td>Functions of neurons</td>
</tr>
<tr>
<td>1934</td>
<td>Whipple, Murphy, Minot</td>
<td>Dog</td>
<td>Liver therapy for anemia</td>
</tr>
<tr>
<td>1935</td>
<td>Spermann</td>
<td>Amphibian</td>
<td>Organizer effect in embryonic development</td>
</tr>
<tr>
<td>1936</td>
<td>Dale, Loewi</td>
<td>Cat, frog, bird, reptile</td>
<td>Chemical transmission of nerve impulses</td>
</tr>
<tr>
<td>1938</td>
<td>Heymansi</td>
<td>Dog</td>
<td>Role of the sinus and aortic mechanisms in regulation of respiration</td>
</tr>
<tr>
<td>1939</td>
<td>Domagk</td>
<td>Mouse, rabbit</td>
<td>Antibacterial effects of pronostiril</td>
</tr>
<tr>
<td>1943</td>
<td>Dam, Doisy</td>
<td>Rat, dog, chick, mouse</td>
<td>Discovery of function of vitamin K</td>
</tr>
<tr>
<td>1944</td>
<td>Erlanger, Gasser</td>
<td>Cat</td>
<td>Specific functions of nerve cells</td>
</tr>
<tr>
<td>1945</td>
<td>Fleming, Chain, Florey</td>
<td>Mouse</td>
<td>Curative effect of penicillin in bacterial infections</td>
</tr>
<tr>
<td>1947</td>
<td>Carl Cori, Gerty, Cori, Houssay</td>
<td>Frog, toad, dog</td>
<td>Catalytic conversion glycogen, role of pituitary in sugar metabolism</td>
</tr>
<tr>
<td>1949</td>
<td>Hess, Moniz</td>
<td>Cat</td>
<td>Functional organization of the brain as a coordinator of internal organs</td>
</tr>
</tbody>
</table>

Chart continued on next page
<table>
<thead>
<tr>
<th>Year</th>
<th>Scientists</th>
<th>Animals Used</th>
<th>Contribution Made</th>
</tr>
</thead>
<tbody>
<tr>
<td>1950</td>
<td>Kendall, Hench, Reichstein</td>
<td>Cow</td>
<td>Antiarthritic role of adrenal hormones</td>
</tr>
<tr>
<td>1951</td>
<td>Thaller</td>
<td>Monkey, mouse</td>
<td>Development of yellow fever vaccine</td>
</tr>
<tr>
<td>1952</td>
<td>Waksman</td>
<td>Guinea pig</td>
<td>Discovery of streptomycin</td>
</tr>
<tr>
<td>1953</td>
<td>Krebs, Lipmann</td>
<td>Pigeon</td>
<td>Characterization of the citric acid cycle</td>
</tr>
<tr>
<td>1954</td>
<td>Enders, Weller, Robbins</td>
<td>Monkey, mouse</td>
<td>Culture of poliovirus that led to development of vaccine</td>
</tr>
<tr>
<td>1955</td>
<td>Theorell</td>
<td>Horse</td>
<td>Nature and mode of action of oxidative enzymes</td>
</tr>
<tr>
<td>1957</td>
<td>Bovet</td>
<td>Dog, rabbit</td>
<td>Production of synthetic curare and its action on vascular and smooth muscle</td>
</tr>
<tr>
<td>1960</td>
<td>Burnet, Medawar</td>
<td>Rabbit</td>
<td>Understanding of acquired immune tolerance</td>
</tr>
<tr>
<td>1961</td>
<td>von Bekesy</td>
<td>Guinea pig</td>
<td>Physical mechanism of stimulation in the cochlea</td>
</tr>
<tr>
<td>1963</td>
<td>Eccles, Hodgkin, Huxley</td>
<td>Cat, frog, squid, crab</td>
<td>Ionic involvement in excitation and inhibition in peripheral and central portions of the nerve</td>
</tr>
<tr>
<td>1964</td>
<td>Block, Lynen</td>
<td>Rat</td>
<td>Regulation of cholesterol and fatty acid metabolism</td>
</tr>
<tr>
<td>1966</td>
<td>Rous, Huggins</td>
<td>Rat; rabbit, hen</td>
<td>Viruses and hormonal treatment of cancer</td>
</tr>
<tr>
<td>1967</td>
<td>Hartline, Granit, Wald</td>
<td>Chicken, rabbit, fish, crab</td>
<td>Primary physiological and chemical processes of vision</td>
</tr>
<tr>
<td>1968</td>
<td>Holley, Khorana, Nirenberg</td>
<td>Rat</td>
<td>Interpretation of genetic code and its role in protein synthesis</td>
</tr>
<tr>
<td>1970</td>
<td>Katz, von Euler, Axelrod</td>
<td>Cat, rat</td>
<td>Mechanisms of storage and release of nerve transmitters</td>
</tr>
<tr>
<td>1971</td>
<td>Sutherland</td>
<td>Mammalian liver</td>
<td>Mechanism of the actions of hormones</td>
</tr>
<tr>
<td>1972</td>
<td>Edelman, Porter</td>
<td>Guinea pig, rabbit</td>
<td>Chemical structure of antibodies</td>
</tr>
<tr>
<td>1973</td>
<td>von Frisch, Lorenz, Tinbergen</td>
<td>Bee, bird</td>
<td>Organization of social and behavior patterns in animals</td>
</tr>
<tr>
<td>1974</td>
<td>de Duve, Palade, Claude</td>
<td>Chicken, guinea pig, rat</td>
<td>Structural and functional organization of cells</td>
</tr>
<tr>
<td>1975</td>
<td>Baltimore, Dulbecco, Temin</td>
<td>Monkey, horse, chicken; mouse</td>
<td>Interaction between tumor viruses and genetic material</td>
</tr>
<tr>
<td>1976</td>
<td>Blumberg, Gajdusek</td>
<td>Chimpanzee</td>
<td>Slow viruses, and new mechanism for dissemination of diseases</td>
</tr>
<tr>
<td>1977</td>
<td>Guilemin, Schally, Yalow.</td>
<td>Sheep, swine</td>
<td>Hypothalamic hormones</td>
</tr>
<tr>
<td>1979</td>
<td>Cormack, Hounsfield</td>
<td>Pig</td>
<td>Development of computer assisted tomography (CAT scan)</td>
</tr>
<tr>
<td>1980</td>
<td>Benacerraf, Dausset, Snell</td>
<td>Mouse, guinea pig</td>
<td>Identification of histocompatibility antigens and mechanism of action</td>
</tr>
<tr>
<td>1981</td>
<td>Sperry, Hubbell</td>
<td>Wiesel, Cat, monkey</td>
<td>Processing of visual information by the brain</td>
</tr>
<tr>
<td>1982</td>
<td>Bergstrom, Samuelsson, Vane</td>
<td>Ram, rabbit, guinea pig</td>
<td>Discovery of prostaglandins</td>
</tr>
<tr>
<td>1984</td>
<td>Millstone, Kochler, Jerne</td>
<td>Mouse</td>
<td>Techniques of monoclonal antibody formation</td>
</tr>
<tr>
<td>1986</td>
<td>Levi-Montalcini, Cohen</td>
<td>Mouse, chick, snake</td>
<td>Nerve growth factor and epidermal growth factor</td>
</tr>
<tr>
<td>1987</td>
<td>Tonegawa</td>
<td>Mouse embryo</td>
<td>Basic principles of antibody synthesis</td>
</tr>
<tr>
<td>1989</td>
<td>Varmus, Bishop</td>
<td>Chicken</td>
<td>Cellular origin of retro viral oncogenes</td>
</tr>
<tr>
<td>1990</td>
<td>Murray, Thomas</td>
<td>Dog</td>
<td>Organ transplantation techniques</td>
</tr>
<tr>
<td>1991</td>
<td>Neher, Sakmann</td>
<td>Frog</td>
<td>Chemical communication between cells</td>
</tr>
</tbody>
</table>
TechLink: A New Listserv for AALAS Technicians

One of AALAS's newest member benefits, TechLink is an electronic mailing list (listserv) created especially for animal care technicians in the field of laboratory animal science. Open to any AALAS National member, TechLink serves as a medium for laboratory animal technicians to exchange information and conduct discussions of common interest via e-mail messages with technicians in the U.S. and other countries around the world.

TechLink is a resource for technicians to use when they have questions or comments about:
- current topics/hot issues
- AALAS Certification or Registry
- environmental enrichment
- animal care or support issues
- TechTalk articles
- AALAS educational programs and more.

TechLink is open to all AALAS National members, yet was created as a resource primarily for technicians.

To subscribe to the TechLink mailing list, send e-mail to: listserv@listserv.aalas.org with the body of the mail consisting of the following (the command must be in the body, not the subject):

```
subscribe techlink yourfirstname yourlastname
(example) subscribe techlink John Doe
```

You will receive a message acknowledging your subscription request. Upon review by AALAS, you will be added to the list and begin receiving messages. Once on the TechLink list, simply send messages to techlink@listserv.aalas.org.

AALAS Initiates "National Laboratory Animal Technician Week"

During the 50th AALAS National Meeting held in Indianapolis in November, the Committee on Technician Affairs (CTA) agreed to create a National Laboratory Animal Technician Week. Because the year 2000 is AALAS' 50th year of existence, it was decided that what better way to celebrate than to recognize our technicians for what they do.

Therefore, January 30 through February 5, 2000, has been proclaimed as the first "National Laboratory Animal Technician Week." This event will be celebrated annually to recognize laboratory animal technicians nationwide for their essential contributions as members of the research team.

Registrations Now Being Accepted for Electronic Media Conference in 2000

The "Electronic Media: Animal Care 2000" conference will be held February 9-11, 2000, in Orlando, Florida. Co-sponsoring the event will be AALAS, LAMA, LAWTE, OPRR, University of Florida, University of Central Florida, Florida A&M University, and the University of Miami. Visit the web site location www.emac2000.org for a complete listing of the program as well as online registration information. Hurry and make plans to attend now!

Coalition Boosts Advocacy Efforts

Thanks to the newly formed Coalition for Public Outreach, AALAS Branch, District, and National members can get assistance and training necessary to go out and speak to schools and other civic groups about laboratory animal science and biomedical research using animals.

The main goal of this Coalition, which is comprised of the State Network Organizations for Biomedical Research Education (SNOBRE), other National biomedical research advocacy groups, and National AALAS, is to provide public outreach training and support to AALAS members. This will be an ongoing educational effort by the Coalition members to provide the skills and tools AALAS members need to effectively communicate a clear, positive and factual representation of the responsible use of animals in biomedical/biological research, testing, and education.

Branches are encouraged to work with Coalition members to create and conduct public outreach training programs at their Branch and District meetings. Financial assistance for Branches planning such training is now available through the AALAS Foundation through a donation made by Pharmacal Research Laboratories.

Contact Jill Worley (901-754-8620 or jill.worley@aalas.org) at the AALAS National Office for further information on how the Coalition can help you in your public outreach training needs and for a brochure containing contact information and programs and materials available from some of these Coalition members.
30 Teams Participate in Technician Fun Fair at National Meeting

The fifth annual Technician Fun Fair held in Indianapolis had 30 teams register. These teams, some made of individuals and some of up to six team members, searched throughout the Exhibit Hall, Learning Resources, and the Poster Session for answers to 160 challenging questions.

These questions were created to expand their knowledge about their national organization, AALAS, and about the field of laboratory animal science.

The 1999 winners of the Technician Fun Fair are as follows:
- 1st place Team—Ben Bonner, Chris Carter, Lyndon Goodly, Robin Kavanaugh, Todd McDaniel, and Jennifer Smith, all from the University of Georgia, Athens.
- 2nd place Team—Robbyne Williams from University of Tennessee at Knoxville.
- 3rd place Team—Lisa Gordon and Mary Watach from the University of Pittsburgh.

First-place team members received a trophy of Fiona the Fun Fair Ferret, AALAS T-shirt, and an AALAS mug; second-place team members received an AALAS T-shirt and AALAS mug; and the third-place winners received an AALAS T-shirt. Thanks to everyone that participated!

Thank You ATA Fun Fair Participants

AALAS thanks the following Allied Trade Association members who participated in the 1999 AALAS Technician Fun Fair. Their participation is what helps make this program a success:

- Alternative Design
- Andersons/Bed-o’cobs, Inc.
- Anmed Biosafe, Inc.
- B & K Universal
- BioReliance Corporation
- Britz-Heidbrink, Inc.
- Charles River Laboratories
- Covance Research Products
- Edstrom Industries, Inc.
- Elm Hill Breeding Labs
- Harlan Sprague Dawley
- The Jackson Laboratory
- Lab Products, Inc.
- Nuaire, Inc.
- Pharmaceutical Research Laboratories, Inc.
- SIMS Deltec, Inc.
- VetEquip, Inc.

Visit AALAS’ Redesigned Web Site

AALAS’ redesigned web site is structured to help you find information faster as well as introduce a new “face” for those not familiar with AALAS!

A great deal of information is readily available to members of AALAS. All you have to have is your personal Alpha username and password. If you have not applied for your Alpha username and password already, send an email message to security@aalas.org with your name and membership number.

Are you looking for a product or service? Go to www.aalas.org and select the vendor button. This is the same type of information displayed in the annual Reference Directory. Now you can find a supplier that will supply not only one but maybe even all of your animal needs.

Are you looking for a new career? Maybe a change in scenery? Take a look at AALAS’ CareerLine. Twelve new advertisements for open positions have been posted over the last month. Also available is an area to let companies know that you are looking for a job. So if you are looking for an employer/employee be sure to check out CareerLine!

Many resources are available through AALAS’ web site. Are you looking for someone? You know, that person that you met at the last National Meeting but you didn’t get their address or phone number? Try out the on-line member search engine made available only to AALAS’ members.


Nominations Due March 1

An AALAS National Member you know might be an excellent candidate for either 2001 Vice President-Elect or Secretary/Treasurer.

The deadline is March 1, 2000, for nominating a prospective qualified candidate who meets the eligibility requirements. Mail ballots for voting on candidates for these leadership positions will be mailed to you this summer.

The Nominations Committee will qualify and interview the candidates, check references, select two candidates for both positions, and submit complete information packets to the AALAS National Office by the May 9 deadline for election petitions.

Don’t delay! If you or a prospective candidate would like more information about the positions and qualification criteria, contact Judy Grisamore in the National Office.

www.kids4research.org
Sponsored by Charles River Laboratories through the AALAS Foundation.

Video about Careers in Laboratory Animal Science Updated

The video, Accept the Challenge to Care...Careers in Laboratory Animal Science, has been completely updated and now comes with brochures and a teacher’s guide. This updated video package has been made possible through a generous donation to the AALAS Foundation by Novartis.

The 15-minute video covers the wide variety of career choices available in laboratory animal science from technicians to veterinarians to product design engineers. It is designed to be used at career day presentations, school career guidance offices, or any other classroom environment wanting to promote careers in the science field.

All AALAS Branches have been given a copy of the video for use in their local public outreach efforts to school groups. For the location of your Branch’s copy, please contact your Technician Branch Representative (TBR) or Jill Worley at the AALAS national office (901-754-8620 or jill.worley@aalas.org).
January 21, 2000

TO: 2000 AALAS Officers, Board of Trustees, Alternate Trustees, Committee Chairs, and Branch Presidents & TBRs

FM: James P. Boardman, RLATG
2000 Chair, Awards Selection Committee

RE: Awards Nominations

This letter is a reminder and a call for nominations for the Annual AALAS Awards. I urge you, as the present leaders of AALAS, to actively encourage your district and branch members to take the time to nominate deserving individuals for one or more of the AALAS awards. Please, remind your colleagues that persons who are rewarded for their hard work generally continue to excel and give back to their district and facilities 100-fold--it's called positive reinforcement! Please remember that many people who are worthy of recognition are never nominated because they do the nominating.

Guidelines for award nominations appear in the January 2000 issue of *Contemporary Topics* in Laboratory Animal Science. We will also have the guidelines and more specific criteria available on the AALAS website and on fax-on-demand by March 1st. With these new criteria outlines, we hope to make the nominating process easier and more consistent. The deadline for submission is May 1, 2000. Nomination packets postmarked after May 1 cannot be considered.

Please consider the national award nominations as the logical next step for committees that administer local and district awards. Encourage the reworking and submittal of packages that merit national consideration. If the national deadline precedes your 2000 Branch and District award deadlines, please instruct committees to review 1999 recipients for submission for 2000 awards. We appreciate your support in helping to increase the nominations of deserving potential candidates.

Send nominations to:

AALAS Awards Selection Committee
c/o AALAS
9190 Crestwyn Hills Drive
Cordova, TN 38018
Attn: Carolyn Campbell

cc: R. Weichbrod
R. Simmonds
C. Frisk
Awards Selection Committee
Diet-Induced Obesity Suppressed in Mice

In the race to develop the ultimate drug against obesity, a major health concern, researchers at Millennium Pharmaceuticals, Inc. (Cambridge, MA) have cloned a gene that suppresses weight gain in mice given high-fat diets. On March 11, the researchers reported in *Nature* that they used positional cloning to identify a mutation of the mahogany (mg) gene, which produces a protein that suppresses diet-induced obesity in agouti yellow mice.

"According to Karen Moore, director of genetic systems at Millennium, "The cloning of the mahogany gene and the identification of its protein product are major first steps in achieving a better understanding of their role in controlling weight based on the amount of fat in their diet.""

Mice with the normal mg allele gain weight on a high-fat diet (42% fat). However, a mutation of mg suppresses this normal diet-induced obesity. Mice with the mutant mg gene maintain a healthy weight on a high-fat diet (42% fat) or low-fat diet (9% fat) with the same amount of calories.

Robert Tepper, Chief Scientific Officer of Millennium's pharmaceutical division, predicts, "The targetability of the mahogany protein offers us an excellent opportunity to pursue the development of a small molecule that could attach to a receptor and affect the protein's function. If successful, the small molecule could become the basis of a drug for obesity."

"Adds Moore, "we are optimistic about using the protein for obesity drug development. In developing a drug, it is always easier to decrease gene function rather than try to increase it."

"There are 50 million obese American adults. Serious health risks such as hypertension, stroke, heart disease, and diabetes are associated with obesity, in both humans and mice. The similarity between mouse and human metabolism suggests that this mouse model holds promise for the eventual development of an effective therapy for human obesity." —En by Poe
We hope it’s harmless...

Our blood supplies contain a mysterious viral passenger

A MYSTERY virus is contaminating blood supplies throughout the world. No one knows whether this "TT" virus is dangerous, but there are fears that it might cause liver disease.

At the annual meeting of the American Society for Microbiology, held in Chicago last week, researchers from California reported finding the virus in apparently healthy blood donors. And a French team announced that they had found TT virus both in blood donors and in patients with liver disease undergoing transfusions.

After the problems caused by HIV and various hepatitis viruses, the discovery of any new virus in donated blood is worrying. But while some TT virus carriers are suffering from liver disease, it is not yet clear whether the TT virus is responsible. It’s also unclear whether the virus is spreading, or if it has been present at about its current levels for many years.

“No one knows the significance,” admits Bernie Betlach of the Sacramento Medical Foundation Center for Blood Research.

The virus was named after the initials of the Japanese patient in whose blood it was first found, two years ago. Its discoverers, led by Hiroaki Okamoto of the Jichi Medical School in Tochigi, isolated the virus from patients who had hepatitis-like symptoms but no detectable hepatitis viruses in their blood.

Last week, Betlach revealed that he and his colleagues Paul Holland and Malcolm MacKenzie have isolated the virus from 8 of 102 healthy blood donors in northern California. Blood from all of the donors had tested negative for viruses including hepatitis B and C and HIV.

Marc Bogard of the General Hospital in Meaux, France, also presented new data. Out of a total of 14 patients receiving blood transfusions for liver disease from Meaux or at a collaborating university hospital in Rouen, 33 carried the TT virus. Only 17 of the 140 tested positive for the virus that causes hepatitis C.

From other studies on healthy donors, Bogard estimates that between 4 and 6 per cent of the French population is carrying the virus. About 13 per cent of people in Japan are thought to be infected and in a paper published last July in The Lancet (vol 352, p 191), the rate in Britain was estimated at 2 per cent.

The challenge, Bogard says, is to find out whether the virus poses any risk to health. “We are following volunteers who have TT virus but are healthy and clear of hepatitis viruses to see if they develop liver disease,” he says.

Bogard says that blood from the volunteers will be monitored for the enzyme alanine aminotransferase, levels of which are typically three times as high as normal in people with chronic liver disease.

Betlach, Bogard and other virologists studying TT virus around the world are anxious not to cause panic, particularly given recent experiences with a virus dubbed hepatitis G. This was linked with chronic liver disease in 1995, but subsequently cleared. Andy Coghlan, Chicago
Support Our Sponsors

ANIMAL SPECIALTIES, INC.
CERTIFIED ISO 9002 LAB DEALER
PURINA LAB & TEST DIETS, MAZURI,
HARLAN TEKLAB LAB & TEST DIETS,
BIO-SERVE, ANDERSON, SHEPPARD,
NORTHEASTERN, CAREFRESH

BILL & LIA HALTER
CALVIN YOUNG

503-981-4738
FAX: 503-981-4528
PO Box 328 Hubbard, OR 97032

Your complete research animal resource

Harlan
• Laboratory Animals
• Surgical and Contract Services
• Diets
• Bedding
• Isolators

K. C. REESE
Regional Sales Manager

Phone: (317) 894-7025 Ext. 1273
Phone: (317) 894-7521
Fax: (317) 894-1840
P.O. Box 29176
Indianapolis, Indiana 46229-0176

NUAIRE
2100 Fernbrook Lane • Plymouth, Minnesota 55447 U.S.A.
(US/CN) 800-328-3352
612-553-1270
FAX 612-553-0459

• Animal Cage Changing Stations
• Animal Bedding Disposal Cabinets
• Animal Containment Enclosures
• Biological Safety Cabinets
• Clean Benches
• Custom Fabricated Products

If you would like to utilize this space to advertise your product, please contact Marisa Dobiash, 1309 S. Central Ave. Unit D, Kent WA 98032. This Newsletter is currently received by Members representing over 24 institutions across the Northwest and Canada.
### Support Our Sponsors

<table>
<thead>
<tr>
<th>Sponsor</th>
<th>Information</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PRL pharmacoal</strong>&lt;br&gt;RESEARCH LABORATORIES, INC.&lt;br&gt;33 Great Hill Road, Naugatuck, Connecticut 06770</td>
<td>PAUL CHAVEZ&lt;br&gt;West Coast Sales U.S.A. &amp; Canada&lt;br&gt;<a href="mailto:pchavez@pharmacoal.com">pchavez@pharmacoal.com</a>&lt;br&gt;Tel: (800) 243-5350&lt;br&gt;Fax: (203) 729-5230&lt;br&gt;www.pharmacoal.com</td>
</tr>
</tbody>
</table>

| **B&K UNIVERSAL**<br>Providing High Quality Animals & Services for Research<br>Marisa Dobiash<br>Facility/Production Manager | 1309 S. Central Avenue, Suite D<br>Kent, WA 98032<br>Phone: (203) 835-9573<br>Fax: (203) 835-9573<br>1-800-683-9805 |

| **R & R Rabbity Research Development**<br>Antibody Production<br>Laboratory Animals | CHERYL M. ZUVELA<br>Laboratory Manager<br>Ph: (360) 652-7157<br>FAX: (360) 652-5337<br>e-mail: RR@rabbity@cgi.net |

| **ACE**<br>P.O. Box 1589<br>Granite Falls, WA 98252<br>360-691-6364<br>FAX: 360-691-6446 | Ron Ota<br>Technical Consultant<br>Route 526, P.O. Box 698<br>Allentown, NJ 08501-0698<br>1-800-762-2243<br>FAX: 609-259-0449 |

| **Edstrom INDUSTRIES INC.**<br>879 Bakke Avenue<br>Waterford, WI 53185<br>Skeeter Georgeon<br>Laboratory Sales Consultant<br>Pager 800-901-6094<br>Voice Mail 800-345-8074 x380<br>CA FAX 714-639-9972<br>e-mail: skeeter@edstrom.com | 6299 Airpor Road, Suite 303<br>Mississauga, Ontario<br>Canada L4V 1N3<br>Call 905-671-3567<br>FAX 905-671-8766 |

If you would like to utilize this space to advertise your product, please contact Marisa Dobiash, 1309 S. Central Ave. Unit D, Kent WA 98032. This Newsletter is currently received by Members representing over 24 institutions across the Northwest and Canada.
Support Our Sponsors

**WESCO SUPPLY COMPANY**
*Disposable Garments • Sanitary Supplies • Industrial Supplies*
*Specializing in the Vivarium*

ELLIOT SCHWED
5520 E. 2nd Street
Bldg. 1-449
Long Beach, CA 90803
(888) 596-9888
Fax (562) 430-6925

Jason Mayr
206-729-9291 • www.criver.com

---

**CHARLES RIVER LABORATORIES**

Contributing to the Search for Healthier Lives™

---

Earl Morrison
1-800-LAB-RATS • www.criver.com

---

**LabDiet**

David Blocker • Region Sales Manager
P.O. Box 457 • Saraland, AL 36571
Phone: 334.679.0715 • Fax: 334.679.1394
David_Blocker@purina-mills.com • www.labdiet.com

LabDiet is a registered trademark of Purina Mills, Inc.

If you would like to utilize this space to advertise your product, please contact Marisa Dobiash, 1309 S. Central Ave. Unit D, Kent WA 98032. This Newsletter is currently received by Members representing over 24 institutions across the Northwest and Canada.
Five Great Lessons
Some Important Lessons Life Teaches You...

1. Most Important Lesson

During my second month of nursing school, our professor gave us a pop quiz. I was a conscientious student and had breezed through the questions, until I read the last one: “What is the first name of the woman who cleans the school?” Surely this was some kind of a joke. I had seen the cleaning woman several times. She was tall, dark-haired and in her 50's, but how would I know her name? I handed in my paper, leaving the last question blank. Just before class ended, one student asked if the last question would count toward our quiz grade. “Absolutely,” said the professor. “In your careers, you will meet many people. All are significant. They deserve your attention and care, even if all you do is smile and say ‘hello’.” I’ve never forgotten that lesson. I also learned her name was Dorothy.

2. Second Important Lesson – Pickup in the Rain

One night, at 11:30 PM, an older African American woman was standing on the side of an Alabama highway trying to endure a lashing rainstorm. Her car had broken down and she desperately needed a ride. Soaking wet, she decided to flag down the next car. A young white man stepped to help her, generally unheard of in those conflict-filled 1960’s. The man took her to safety, helped her get assistance and put her into a taxi. She seemed to be in a big hurry, but wrote down his address and thanked him. Seven days went by and a knock came on the man’s door. To his surprise, a giant console color TV was delivered to his home. A special note was attached. It read: “Thank you so much for assisting me on the highway the other night. The rain drenched not only my clothes, but also my spirits. Then you came along. Because of you, I was able to make it to my dying husband’s bedside just before he passed away. God bless you for helping me and unselfishly serving others.” Mrs. Nat King Cole.

3. Third Important Lesson – Always remember those who serve you.

In the days when an ice cream sundae cost much less, a 10-year old boy entered a hotel coffee shop and sat at a table. A waitress put a glass of water in front of him. “How much is an ice cream sundae?” he asked. “Fifty cents,” replied the waitress. The little boy pulled his hand out of his pocket and studied the coins in it. “Well, how much is a plain dish of ice cream?” he inquired. By now more people were waiting for a table and the waitress was growing impatient. “Thirty-five cents,” she brusquely replied. The little boy again counted his coins. “I’ll have the plain ice cream,” he said. The waitress brought the ice cream, put the bill on the table and walked away. The boy finished the ice cream, paid the cashier and left. When the waitress came back, she began to cry as she wiped down the table. There, placed neatly beside the empty dish, were two nickels and five pennies – You see, he couldn’t have the sundae, because he had to have enough left to leave her a tip.
4. Fourth Important Lesson – The obstacle in our path.

In ancient times, a King had a boulder placed on a roadway. Then he hid himself and watched to see if anyone would remove the huge rock. Some of the King’s wealthiest merchants and courtiers came by and simply walked around it. Many loudly blamed the King for not keeping the roads clear, but none did anything about getting the stone out of the way. Then a peasant came along carrying a load of vegetables. Upon approaching the boulder, the peasant laid down his burden and tried to move the stone to the side of the road. After much pushing and straining, he finally succeeded. After the peasant picked up his load of vegetables, he noticed a purse lying in the road where the boulder had been. The purse contained many gold coins and a note from the King indicating that the gold was for the person who removed the boulder from the roadway. The peasant learned what many of us never understand. Every obstacle presents an opportunity to improve our condition.

5. Fifth Important Lesson – Giving when it counts.

Many years ago, when I worked as a volunteer at a hospital, I met a little girl named Liz who was suffering from a rare and serious disease. Her only chance of recovery appeared to be a blood transfusion from her 5-year-old brother, who had miraculously survived the same disease and had developed the antibodies needed to combat the illness. The doctor explained the situation to her little brother, and asked the little boy if he would be willing to give his blood to his sister. I saw him hesitate for only a moment before taking a deep breath and saying, “Yes, I’ll do it if it will save her.” As the transfusion progressed, he lay in bed next to his sister and smiled, as we all did, seeing the color returning to her cheeks. Then his face grew pale and his smile faded. He looked up at the doctor and asked with a trembling voice, “Will I start to die right away?” Being young, the little boy had misunderstood the doctor. He thought he was going to have to give his sister all of his blood in order to save her. You see understanding and attitude, after all, is everything.

Please feel free to share this with people you care about and remember to: “Work like you don’t need the money, love like you’ve never been hurt and dance like you do when nobody’s watching.”

Anonymous.
Rats • Mice
Gerbils • Hamsters
Guinea Pigs
Rabbits • Cats
Beagles
Hounds
Swine
Diets
Bedding
Immunological Products
Contract and Surgical Services

As a leading supplier to the biomedical research community, Harlan is committed to providing the complete range of laboratory animals, diets, bedding and immunological products to meet your needs.

Please call for a complete Product Guide that contains information on nine species and 200 stocks and strains of animals, or visit us on the web at www.harlan.com

Harlan
Helping research answer the challenge worldwide

Harlan • P.O. Box 29176 • Indianapolis, Indiana • 46229-0176
Tel.: (317) 894-7521 • Fax: (317) 894-1840
E-mail: harlan@harlan.com • Internet: www.harlan.com
LabDiet® has been providing nutritional excellence in laboratory animal diets to the research community for over 50 years. Since 1917, our formulas have set the industry standard for nutrition in animal diet research and development worldwide.

Each LabDiet® product is manufactured in an ISO 9002 Certified, drug and synthetic estrogen-free plant. The techniques in manufacturing are closely monitored to ensure your lab animals get the constant nutrition your research requires.

Constant Nutrition™ is a concept in diet formulation exclusive to LabDiet® for delivering a constant level of nutrients. We analyze ingredients — in addition to final products — which enables us to achieve greater accuracy.

The LabDiet® product line consists of LabDiet® and TestDiet®. LabDiet® is available in Standard, Certified, Autoclavable, Irradiated, Vac-Pak and Micro-Pak forms, while TestDiet® products are customized diets that can be produced in 10kg minimum quantities.

Our products can be delivered to your door through a local supplier to ensure optimum freshness.

Optimal feeding programs just got easier to administer thanks to Micro-Pack™, the new pre-weighted, portion controlled feeding packages available from LabDiet®.

Each Micro-Pack™ shipping unit contains 800 easy-open feeding packets.

FOR MORE INFORMATION, PLEASE CONTACT:

David Blocker - Region Sales Manager
P.O. Box 457
Saraland, AL 36571
Phone: 334.679.0715
Fax: 334.679.1394
David_Blocker@purina-mills.com
www.labdiet.com
Presenting The PMI® LabDiet® Animal Care Course

Our Course is designed for everyone working with small animals—from new employees to those advancing to the ALAT—It is an internationally recognized and distributed correspondence course that includes six lessons in lab animal management.

HERE'S WHAT'S COVERED:

1. Introduction to laboratory animals:
   A brief history of animals used in research, an outline of the major animal physiological systems, a bird's-eye view of nutrition and preview of disease in an animal colony.
2. Management of laboratory animals:
   Environmental requirements, life cycle data, strains and definitions.

HERE'S WHAT YOU'LL RECEIVE:

1. The six lessons mentioned and a three-ring vinyl notebook for filing all materials.
2. A quiz included in each lesson to be graded by your supervisor.
3. A certificate of completion upon successfully completing the course.

Total cost of each enrollment is $50.00
Send in the application form below along with your check and the course will be mailed to you. You set your own speed.

HERE'S HOW TO ENROLL:

Please select your type of order
(Supervisor will receive all materials):

□ Single Enrollment
□ Group Enrollment
□ Reference Only (no certificate will be issued)
   Please send ___ kits at $50.00 each to be used for REFERENCE ONLY.

Student's Names:

________________________________________________________________________
________________________________________________________________________

Supervisor's Name:

Company or School:

________________________________________________________________________
________________________________________________________________________

UPS Shipping Address (no P.O. Boxes please)

Name: ____________________________________________________________
Company or School: ________________________________________________
Street: __________________________________________________________
City: ___________________ State:_______ Zip: ________________________
Phone: ___________________ Fax: ______________________

Send check or money order (do not send cash) in the amount of $50.00 per enrollment made payable to PMI® LabDiet®, along with this application form to:

Laboratory Animal Care Course
PMI® LabDiet®
Attn:Tricia A. Woodcock
1401 S. Hanley Rd.
St. Louis, MO 63144

SORRY NO C.O.D.S OR PURCHASE ORDERS ACCEPTED

PMI® Nutrition International, Inc. • P.O. Box 19798, Brentwood, MO 63144 USA
1.800.227.8941 • www.labdiet.com

Any Questions?
Call (314)768-4861
Registration has begun for the 14th Annual Charles River Short Course.

The Charles River Short Course on Laboratory Animals is an intensive program designed to educate and update the biomedical and research communities on current trends and technological advances.

The 2000 Short Course includes 50 topics, which are broken into two tracks. Receptions, a trip into Boston and other enjoyable social activities are also included in the registration fee. The Course is filling rapidly! Contact Deborah Curry to request additional information and a registration form.

A one day workshop entitled “Establishing and Maintaining Rodent Production Colonies: Production, Breeding Systems and Production Planning” will also be offered in conjunction with the 2000 Short Course.

A discount will be offered for those who care to attend both the Workshop and the Charles River Short Course.

For a complete list of topics and to register on-line for both the Short Course and the Workshop, check us out at www.criver.com or contact Deborah Curry at (978) 658-6000 ext. 1488.

We hope to see you in June!
A workshop "Establishing and Maintaining Rodent Production Colonies: Production, Breeding Systems and Production Planning" will be presented on Sunday, June 18, 2000, just before the 14th Annual Charles River Short Course.

This 1 day workshop will be a detailed review of rodent production with an emphasis on types of breeding systems, associated record-keeping and colony production planning needed to breed and maintain colonies of transgenic rodents. General husbandry practices and environmental parameters conducive to good reproductive performance will also be covered as well as suggestions for approaches to problem-solving poor reproductive performance that can be seen with induced-mutant models.

**WORKSHOP REGISTRATION FEE INCLUDES:**
Workshop Materials, Breakfast, Lunch, Evening Reception, Breaks and Certification of Contact Hours.

**HOUSING:** The Short Course and Workshop will be held at the Wyndham Andover Hotel, 123 Old River Road, Andover, MA 01810, (978) 975-3600. A limited number of rooms have been reserved at a rate of $90 per night (single or double). A government rate of $83 has been obtained for those with a government I.D. Call to make your housing reservations and mention your attendance at the CRL Short Course to secure the special rate.

If you would care to attend, please forward a check with this registration form payable to:

Charles River Laboratories, c/o Deborah Curry, 251 Ballardvale Street, Wilmington, MA 01887

Please contact Deborah Curry at (978) 658-6000 ext. 1468 if you have additional questions.

---

**register**

<table>
<thead>
<tr>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Title</td>
</tr>
<tr>
<td>Institution</td>
</tr>
<tr>
<td>Address</td>
</tr>
<tr>
<td>City/State/Zip</td>
</tr>
<tr>
<td>Phone/Fax</td>
</tr>
<tr>
<td>E-mail</td>
</tr>
</tbody>
</table>

☐ Workshop Commercial Registration Fee - $195.00
☐ Workshop Non-Profit Registration Fee - $165.00
Quality. Control.

That's what Charles River is known for.

A commitment to providing the research community with the highest quality animals and total control of product uniformity from facility to facility, country to country, and year to year.

Rats • Mice • Hamsters • Guinea Pigs • Rabbits • Gerbils
Miniature Swine • Surgical Services • Transgenics Models and Services
Laboratory Services • SPF Chicken Eggs • Contract Staffing Services

CHARLES RIVER LABORATORIES

Contributing to the Search for Healthier Lives™

251 Ballardvale Street, Wilmington, MA 01887 • 1.800.LAB.RATS • www.criver.com
APPLICATION FOR SPONSER RENEWAL

Please Note: Your application fee includes membership for one individual in the Washington Branch AALAS

Company Name:  

Company Contact:  

Company Street Address:  
City  
State  
Zip Code  

Company Phone Number:  
E-Mail Address (if available)  

Please indicate Type of Sponsorship:

☐ Business Card - Include business Card with your order: $10 per issue or $35 per year (four issues)

☐ Half-Page Ad - Include exact copy with your order: $20 per issue or $75 per year (four issues)

☐ Full-Page Ad - Include exact copy with your order: $40 per issue or $150 per year (four issues)

Mail Checks Payable to: WBAALAS

WBAALAS Treasurer
Sally Varnam
PSHSVA (151-L)
1660 S. Columbian Way
Seattle WA 98108
(206) 764-2918

Branch Use Only:

[Table with columns for type of sponsorship and corresponding amounts, check boxes for inclusion in issues, and fields for check number and payment tracking]

Processed by  

<Signature>  

WFM - 199?
Washington Branch AALAS 2000 Individual Membership Application

Individual Membership dues are $10.00 per person. Please make check or money orders payable to WBAALAS.

<table>
<thead>
<tr>
<th>NAME</th>
<th>COMPANY/INSTITUTION</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>STREET ADDRESS</th>
<th>CITY</th>
<th>ZIP</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PHONE NUMBER (INCLUDE AREA CODE)</th>
<th>E-MAIL ADDRESS (IF AVAILABLE)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**PLEASE REMIT WITH PAYMENT AND OTHER INQUIRES TO:**

WBAALAS Treasurer  
Sally Varnam  
PSHSVA (151-L)  
1669 S. Columbian Way  
Seattle WA 98108

**WBAALAS BRANCH OFFICIAL USE**

- Date Received
- Date Membership Card Sent Out
- Date Payment Processed With Treasurer
- Member's Check Number
- Processed By

---

Washington Branch AALAS 2000 Institutional Membership Application

Institutional Membership dues are $50.00 (which includes 3 memberships). Make check payable to WBAALAS.

<table>
<thead>
<tr>
<th>MEMBER NAME (1)</th>
<th>E-MAIL ADDRESS (1) (if available)</th>
<th>PHONE (INCLUDE AREA CODE)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>MEMBER NAME (2)</th>
<th>E-MAIL ADDRESS (2) (if available)</th>
<th>PHONE (INCLUDE AREA CODE)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>MEMBER NAME (3)</th>
<th>E-MAIL ADDRESS (3) (if available)</th>
<th>PHONE (INCLUDE AREA CODE)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>COMPANY/INSTITUTION NAME</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>STREET ADDRESS</th>
<th>CITY</th>
<th>ZIP</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**PLEASE REMIT WITH PAYMENT AND OTHER INQUIRES TO:**

WBAALAS Treasurer  
Sally Varnam  
PSHSVA (151-L)  
1669 S. Columbian Way  
Seattle WA 98108

**WBAALAS BRANCH OFFICIAL USE**

- Date Received
- Date Membership Card Sent Out
- Date Payment Processed With Treasurer
- Member's Check Number
- Processed By
WASHINGTON BRANCH 2000 BOARD OF DIRECTORS

ELECTED OFFICERS

Past-President (98-00)
Marisa Dobias
B&K Universal
1309 S. Central Ave., Unit D
Kent, WA 98032
(253) 813-8941
fax (253) 813-8942

President (99-01)
Tim Dawe
University of Washington
Dept. of Comp. Medicine
Seattle, WA 98185
(206) 616-4557
fax (206) 616-4559
tdawe@u.washington.edu

President-Elect (00-02)
Gina Desfacheles
NeoRx Corporation
410 W. Harrison
Seattle, WA 98119
(206) 281-7001 #208
fax (206) 298-9442
gensgris@neorx.com

Treasurer (00-01)
Sally Varnam
VAMC, GMR-151
1660 S. Columbian Way
Seattle, WA 98108
(206) 764-2918
fax (206) 768-5358
varnam.sally_j@seattle.va.gov

Secretary (99-00)
Sylvia Johnson
B&K Universal
1309 S. Central Ave., Unit D
Kent, WA 98032
(253) 813-8941
fax (253) 813-8942
weiss@puylallup.wsu.edu

ELECTED BOARD MEMBERS

Jolene Kidney (00-01)
Pathogenesis
201 Elliot Ave. W., Suite 150
Seattle, WA 98119
(206) 674-6657
fax (206) 270-3313
jkidney@pathogenesis.com

Laurie Wilcox (99-00)
Zymogenetics
1202 Eastlake Ave. E
Seattle, WA 98102
(206) 442-6600 #6416
fax (206) 515-4911
wilcox1@zei.com

Gary Millen (00)
University of Washington
Dept. of Comp. Medicine
Seattle, WA 98195
(206) 543-0641
fax (206) 543-7706
gmillen@u.washington.edu

Honorary Board Member
Ron Orta
Allentown Caging Equipment
P.O. Box 1589
Granite Falls, WA 98252
(360) 691-6364
ron_orta@prodigy.com

Newslette r Editor
c/o Tim Dawe
University of Washington
Dept. of Comp. Medicine
Seattle, WA 98195
(206) 616-4557
tdawe@u.washington.edu

Program Chairman
Sally Varnam
VAMC, GMR-151
1660 S. Columbian Way
Seattle, WA 98108
(206) 764-2918
varnam.sally_j@seattle.va.gov

APPOINTED POSITIONS

Awards Chairman

Education Chairman
Cindy Pekow
VAMC, GMR-151
1660 S. Columbian Way
Seattle, WA 98108
(206) 764-2448
cpekow@u.washington.edu
2000 Calendar

March 10
WBAALAS Spring Trade Fair
U of W Horticulture Center

August 12
WBAALAS Annual Picnic

November 5-9
National AALAS Convention
San Diego, CA

December
WBAALAS Holiday Party

WBAALAS NEWSLETTER

c/o Tim Dawe
University of Washington,
Dept. of Comparative Medicine
Box 357190
Seattle, WA 98195

March 2000