



AAVPT Newsletter

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AAVPT

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FROM THE PRESIDENT

Rick Vulliet

prvulliet@ucdavis.edu

Colleagues,

Wow! 2008 has sure opened up with a bang and most of us, or at least me, are running as fast as we can just to stay in place. Fortunately for most of us, some of our members have been very busy and have organized a workshop that will focus on improving small animal antimicrobial label information more useful for the practitioner. The workshop will be jointly sponsored by AAVPT and USP with input from the FDA. As is our tradition, the organizing committee includes representatives from FDA, academics and industry. The workshop will be held in the Washington DC area at the USP facilities next fall. The organizing committee includes Marilyn Martinez, Melanie Berson, Ralph Claxton, Jan Donecker Anthony Lucas, Jane Owens, Carol Davis, Mike Apley and Mark Papich. The committee has done a tremendous job of putting together an excellent program to cover this delicate but necessary topic. If you have ideas for the program or would like to make a contribution, please contact any member of the committee, although the program is well organized by now. Good job, Guys and stay tuned!

AAVPT is an organization that utilizes a committee structure to accomplish its goals. The executive committee will be filling key committee assignments at our next conference call. Service on AAVPT committees is one of the best ways to be active in the organization and if you are interested in a committee assignment, please contact any of the officers soon. And remember, if we do not get enough volunteers, we will have to resort to the draft to fill these key positions. Please contact your officers and volunteer!

And just when you think that you are starting to get caught up, we are in the early planning for our next biennial meeting that will be held in the Washington DC area in 2009. As President-elect, Carol Davis will be spearheading the meeting and is actively seeking member input for both the program and the venue. So if you have any ideas, feel free to email her.

Now back on our treadmills!

Rick

FROM THE PRESIDENT-ELECT

Carol A. Davis, Ph.D.

aavpt.cdavis@comcast.net

Program Activities

2008 AAVPT Workshop

Well, 2008 is shaping up to a very busy year for AAVPT. This is particularly true in the area of programming as we are preparing a workshop to be held this year and working on plans for our 2009 16th biennial symposium. Early last fall, individuals at CVM approached the AAVPT officers to find out if the AAVPT would be interested in sponsoring a workshop on antimicrobial labeling in dogs and cats. After discussions, the executive counsel approved the workshop for 2008. It was decided the best time for the meeting would be in early September or October in Washington, DC area. It has been some time since AAVPT have sponsored a stand alone workshop and it gives us an opportunity to offer a program with a more focused theme as opposed to our symposia. The workshop will be a two day meeting to discuss issues around labeling of antibiotics in dogs and cats.

A program committee was selected early last fall and we have had meeting on a bimonthly basis since then to develop location and agenda for the meeting. Since we had a very short time frame the committee has been working hard to get the agenda outlined, the location pinned down, the target audience identified and to connect up with other organizations we felt would be interested in this type of workshop. Our initial thoughts were to hold the meeting at some location similar to the Doubletree hotel (now Hilton Hotels) where the 14th Biennial Symposium was held since it would be convenient for all. As it turns out we were able to arrange to have the meeting at the new USP facilities in Rockville, MD. Please mark you calendar with these dates and we encourage our members to attend the meeting. We are very excited and pleased that USP had offered to host our meeting and I want to thank Dr. Mark Papich and Dr. Ian DeVeau for their effort to get this arranged. I hear the meeting facilities are outstanding and I think the AAVPT will be the first outside organization to host a meeting in their new facilities. The arrangements have been finalized and USP will provide the meeting rooms, meals and

audio/video support. Attendees will stay at various hotel located near the USP and convene at the USP for the two days of the meeting.

The title of the workshop is:

“The Exploration of Developmental Approaches to Companion Animal Antimicrobials: Providing for the Unmet Therapeutic Needs of Dogs and Cats.”

Location: U.S. Pharmacopeia, Rockville, MD

Date: October 23 – 25, 2008

The **objective** is to create alternative approaches to data development supporting new labeling indications consistent with the therapeutic needs of companion animal medicine.

The **intended audiences** are Veterinary Practitioners, Veterinary Specialists, Academicians, Pharmaceutical Industry representatives, and Federal Regulators.

The agenda has been completed and all the speakers are confirmed (see the program in this issue). The registration form and complete program agenda should be posted on the website by the time you read this newsletter.

If you have any questions, please feel free to contact me or any committee member (Drs. Anthony Lucas, Mike Apley, Mark Papich, Ian DeVeau, Amy Neal, Ralph Claxton, Jay Donecker, Marilyn Martinez, Melanie Berson, Linda Wilmot, Michele Sharkey, and Carol Davis). Although we still have lots to do I want to thank the members of the committee for the time they have given up to this point and for their continued commitment to the project. I would especially like to thank all the people at CVM for their help early on running around Washington area checking on potential sites.

AAVPT/USP CO-SPONSORED WORKSHOP PROGRAM

The Exploration of Developmental Approaches to Companion Animal Antimicrobials: Providing for the Unmet Therapeutic Needs of Dogs and Cats

THURSDAY, OCTOBER 23, 2008

8:50 – 9:10 AM

Workshop Overview

Dr. Mark Papich, North Carolina State University

9:10 – 9:55 AM

Regulatory History and Framework

Dr. Melanie Berson, FDA/CVM

10:15 – 11:00 AM

Developing Antimicrobials for Companion Animals

Dr. Steve Sutherland, Pfizer Animal Health and Dr.

Ralph Claxton, Boehringer Ingelheim Vetmedica, Inc.

1:00 – 1:15 PM

Identify the Essential Information Needed on the Labeling for Safe and Effective Use of Antimicrobials by the Practitioner

Dr. Dawn Boothe, Auburn University and Dr. Mike Lappin, Colorado State University

1:30 – 2:00 PM

Use of PK/PD in Dose Selection: Its' Application in Human Therapeutics

Dr. William A. Craig, University of Wisconsin-Madison

2:15 – 3:15 PM

Alternative Approaches to Developing Data: A Roundtable Discussion by Academia, Industry, FDA

Dr. Marilyn Martinez, FDA/CVM, Dr. William Craig, University of Wisconsin-Madison, Dr. Scott Brown, Pfizer Animal Health and Dr. Peter Silley, MB Consult Limited, UK

4:00 – 4:15 PM

Summary and Wrap-up of Background

Dr. Carol A. Davis, AAVPT President-elect

FRIDAY, OCTOBER 24, 2008

8:15 – 8:45 AM

USP Monograph Model for Antimicrobials for Companion Animals

Dr. Amy Neal, USP

8:45 – 9:45 AM

Identify Common Infectious Diseases Treated in Practice

Roundtable; Dr. Ching Ching Wu, Purdue University, Dr. Jane Brunt, CHAT (Cat Hospital at Towson), Dr. Mark Hitt, Atlantic Internal Medicine, Dr. Michele Sharkey, FDA/CVM

10:30 – 11:30 AM

Alternative Clinical Trial Designs

Dr. Dave Polzin, University of Minnesota, Dr. Dawn Boothe, Auburn University, Dr. Mike Lappin, Colorado State University

1:00 – 1:45 PM

Challenges of Selecting Control Group(s) and Achieving Statistical Significance

Mr. Joe Boucher, Pfizer, Inc, Dr. Tom Keefe, Colorado State University, Ms. Jean Recta, FDA/CVM

2:00 – 3:30 PM

Group Breakout Session: Discussions of Challenges and Issues with Alternative Approaches

3:45 - 4:15 PM

Report Out/Group Discussion of Promising Options

4:15 – 4:30 PM

Next Steps and Closing Remarks

2009 AAVPT Symposium

As if a workshop in 2008 workshop is not enough, we must begin planning for the 16th Biennial Symposium to be held in 2009. Anthony Lucas, Marilyn Martinez and I have had a couple of meetings to begin thinking about possible themes. These discussions have been good and we have several really good ideas on a general theme for the meeting but are now at the stage we need to get a program committee together to come up a more detailed agenda. We have not decided on the exact location but will try to find a site which will be cost effective and convenient for everyone. If you know of any meeting places you have seen and think might work for our meeting please let me know. One of our biggest challenges is to find a location that has acceptable meeting rooms with audio/video support without costing an arm and a leg.

I encourage you to send me any ideas you might have on topics or if you want to help, volunteer to work on the program committee. It is a great way to learn how the AAVPT works and I can tell you, you will work with really great people. It is very rewarding and is an excellent way to find out what our organization is all about. Please feel free to call me or email me at anytime. I promise your call does not mean you are obligated in anyway but we encourage members get involved.

As you recall our 2007 meeting was held at the Asilomar Conference Center in California and was a great location, but it was decided the next meeting would be held in the Washington, DC area so we will begin our efforts by looking into various sites. We have a little over a year to get the meeting organized which is not much time. I anticipate the meeting will be around the same time as in 2007, late May or early June. I will try to keep everyone informed as we move forward and get things lined up. I am looking forward to both of these meetings and am confident they will be great successes.

SECRETARY/TREASURER REPORT MARCH 2008

Anthony Lucas

Special Thanks to Joe Gloyd for a job well done!

There are many, many parts to the Secretary/Treasurer role, all of which are critical to the smooth running and continued existence of the organization. On behalf of the AAVPT, I would like to thank Joe Gloyd for his excellent stewardship of the AAVPT Secretary/Treasurer role for the past 2 years.

Transfer of Secretary/Treasurer responsibilities

I would also like to thank the membership for your patience with me getting up to speed with the responsibilities of the Secretary/Treasurer and most specifically with the new member and membership renewal processes. I significantly underestimated the time required to set-up a new non-profit bank account activated and get the credit card machine account information changed and this has led to delays in getting the new member applications and 2008 membership dues processed.

New Members

The AAVPT continues to attract new members. Since the Summer '07 newsletter, we have 1 new fellow (Leslie Rausch-Derra), 4 new regular (Sidonie Lavergne, Robin Butchin, Bruce Martin and Cornwell Shiu) and 2 new student (Joseph Rubin and Francesca Sampieri) members. The contact details for these new members have been added to the AAVPT website membership directory and I would encourage you to make these folks welcome to this great organization.

Interestingly, nearly all of the new members have come through referrals of colleagues or through the sponsorship of students by their supervisors. Thank-you to those of you who referred these members, and especially to those who paid from their own pockets to encourage the involvement of the next generation of veterinary pharmacologists. There is a message in this for all of us, to think about whether any of your colleagues, peers or reports would benefit from becoming a member and to proactively get them involved. As your Secretary/Treasurer, please let me know if there is anything I can do to help increase our membership.

New Emeritus Fellows

We received notice from three fellows that they have retired. Drs. David Watson, Akira Ohga and R. Lee Pyle have been fellows of the AAVPT since 1979, 1978 and 1978, respectively. Since the AAVPT only started in 1977, these Fellows have been a part of the organization for nearly all of its existence.

2008 AAVPT Dues

As of March 2, there were 96 members/fellows who had paid their 2008 AAVPT dues. This leaves 87 members/fellows unaccounted for and so I will be sending out reminder notices at the mid March. Dues may be paid

by checks or credit cards, which may be sent by fax, email or even by telephone. Fax#317-433-4606; telephone 317-651-4371; email: aavptst@hotmail.com.

AAVPT Checking Account

Our checking account stands at \$11450.67. However, the majority of that amount is a result of the recent Dues and JVPT journal subscriptions. As soon as the flow of payments slows, I will transfer most of this balance to the higher interest paying accounts under the charge of the Comptroller.

AAVPT Award Fund

At this point, 18 individuals have contributed a total of \$979 to the award fund. That is less than the \$1,100 we received last year, but we are only just over half way through the dues payment process, so I am hopeful that we will beat last year's total. The amounts given ranged from \$10 to \$200 and it is interesting to note that many contributors used the awards fund as an opportunity to round off their dues payment to a nice round figure i.e. \$35 in dues, \$98 for the journal and \$67 to make it an even \$200.

Many thanks to the loyal AAVPT members who gave to the fund!

AAVPT Website Membership Directory

The membership database is critical to managing the membership of the organization and so it is critical that the information it contains is current. To this end, I have been updating the membership directory on the website as I have processed each of the Dues notices, resulting in numerous changes to many members information. As I would like to ensure that everyone's information is correct, I would appreciate it if everyone could please check their details in the directory and let me know if anything is incorrect. The membership directory can be reached at <http://www.avpt.org/member/admin>, with the user name "aavpt" and the password "acadmem". Please email updates/changes to aavptst@hotmail.com.

Listserv

I have yet to update the listserv with the updates reported/found during the Dues process. I will hopefully get to the reconciliation during March/April. If before I get to this, you have changes to your entry on the listserv; please let me know at aavptst@hotmail.com.

JOURNAL OF VETERINARY PHARMACOLOGY AND THERAPEUTICS (JVPT)

Jim Riviere

Journal of Veterinary Pharmacology and Therapeutics (JVPT): The JVPT has survived yet another year, one that has seen a number of benchmarks achieved. Our number of submissions this year has increased to over 200 articles, double what occurred before the journal was webified in 2006! Of these, 40% are rejected and the rest ultimately published after successful revision. We presently have an average time of 69 days from submission to final decision. 2007 also saw the publication of the Pfizer-sponsored supplement on Managing Canine Obesity. {As a note, although the publication costs for this supplement was born by the sponsor, all articles underwent complete peer review with extensive revisions to insure the articles were of the quality expected of JVPT.} As reported earlier, our impact factor continued to increase last year to 1.406 which ranks us in the top 22 of 128 veterinary journals.

There are problems associated with this growth. More articles mean more requested reviews from our Editorial Board and AAVPT members. I wholeheartedly "Thank You" for the work you have done to monitor quality of these papers. The webification of the journal has led to some headaches associated with the functionality of Scholar One, the software which handles manuscript processing. Although the vast majority of papers are handled without problems, at most 5 of the 206 submitted in 2007 have had some difficulty with "computer incompatibilities." One proactive fix to some of these is to make sure your "pop-up blocker" is inactivated when visiting the website. Should you be late on sending in a revision, contact me as I can reset this function. Finally, Scholar One loves to send out e-mails reminding you of various deadlines or steps in manuscript processing. . Expect auto-generated reminders but PLEASE do NOT take them personally. I apologize for any frustrations this system has given to authors and reviewers, however, thousands of journals are handled on Scholar One and for the vast majority of our submissions, the manuscripts are processed seamlessly.

We still need review articles to keep our journal vital to our readership. Should you have ideas, please do not hesitate to contact Mark Papich (Mark_Paich@ncsu.edu) our Review Editor. {Do note that review articles are also subject to peer review.} For our industrial colleagues, supplements are a great way for you to get peer-reviewed technical detail out to the profession and world, while also helping the journal. Please consider this route of publication. Finally, to keep the journal relevant and "up-to-date", all members should strive to submit your best work to our journal.

Thank you again for allowing me to serve you as Editor of this journal. Should you ever have questions or comments, do not hesitate to contact me (Jim_Riviere@ncsu.edu).

Jim

AWARDS COMMITTEE REPORT MARCH 2008

Anthony Lucas

The AAVPT awards are usually awarded at the AAVPT biennial symposium, then next of which will be in Washington DC in 2009. The awards are the Lloyd E. Davis Award, the AAVPT Service Award, the AAVPT Teaching Award, the AAVPT Research Award and the [Resident/Graduate Student Pharmacology Research Award](#). Information on each of these awards can be found on the AAVPT website (www.aavpt.org).

In 2008, it is hoped that the Resident/Graduate Student Pharmacology Research Award will be awarded jointly by the AAVPT and ACVCP at ACVIM in June. The AAVPT awards committee will work with the ACVCP awards committee to call for abstracts and judge the award.

For 2009, it is hoped that all five awards will be presented at the 16th Biennial AAVPT Symposium in Washington DC. A request for nominations for each award will be circulated later in the year via the AAVPT listserv and newsletter and we look forward to your thoughtful responses to this opportunity to publicly acknowledge the outstanding contributions of a wide range of members of the veterinary pharmacology community.

LIAISON REPORTS

AVMA Animal Agriculture Liaison Committee (AALC)

Dan Gingerich

The focus of AALC is to study and advise AVMA on issues that involve the interface between animal agriculture and public health, food safety, the environment, wildlife, etc. Recent issues have included veterinarians' roles in preparedness for infectious disease outbreaks, interface between livestock and wildlife (e.g. potential for domestic sheep to expose bighorn sheep to fatal disease), environmental issues associated with concentrated animal feeding operations (CAFOs), antimicrobial resistance, etc. Two issues regarding drug availability are of particular interest to AAVPT as follows.

Antimicrobial resistance

None of us need be reminded that antimicrobial resistance is a global public health concern that is impacted by both human and animal antimicrobial use. International groups including the Food and Agricultural Organization, (FAO) World Organization for Animal Health (OIE), and World Health Organization (WHO) have convened several meetings of experts. A list and categorization of drugs according to their importance in human medicine (*critically important, highly important, and important* antimicrobials) is being developed

http://www.who.int/foodborne_disease/resistance/antimicrobials_human.pdf. Needless to say, AVMA is participating in and following up on these deliberations.

Proposal to ban sodium cyanide and sodium fluoroacetate

Another drug availability issue involves drugs for predator control to protect livestock. Sodium cyanide capsules for M-44 ejectors and sodium fluoroacetate (Compound 1080) for livestock protection collars are currently approved by Environmental Protection Agency (EPA) for use in predator control, by trained personnel under well defined conditions. EPA was petitioned by an environmental group to ban such use. EPA put the issue out for public comment. Wildlife management officials, including veterinarians, regard these drugs as valuable management tools and strongly oppose the ban.

AVMA COBTA

Cory Langston

FDA-VMAC

The AVMA strongly supports the FDA draft guidance addressing voting procedures for advisory committee meetings. In a letter to the FDA, the AVMA expressed its belief that VMAC members need a sufficient opportunity to deliberate prior to voting. A collaborative advisory input broadens the base of information, enhances the deliberations, and improves the quality of decisions.

Pet Food Health Claims

The AVMA recognizes that the Food and Drug Administration (FDA) uses enforcement discretion in the oversight of certain pet food claims. Even though many of these foods could legally be considered drugs, certain claims are not FDA approved; consequently, efficacy for these products cannot be assured.

Therefore: The AVMA encourages the pet food industry to act responsibly by only making health or therapeutic claims that are supported by quality scientific evidence.

Veterinarians should assess relevant product information through principles of evidence-based medicine prior to using or recommending wellness or therapeutic pet foods.

In the interest of pet safety, AVMA recommends the FDA require all pet food products with implied or explicit health or drug claims to include a prominent statement on the label indicating that these claims have not been evaluated by the FDA.

FDA Adverse Event Reporting & Pharmacovigilance

AVMA continues to work with the FDA Office of Surveillance and Compliance on improving the FDA's Adverse Drug Event Reporting System. The current posting of accumulated reported clinical signs is misleading and provides no context from which to derive a fact-based decision. Detailed safety summaries derived from Adverse Drug Event analyses would better serve veterinarians and the public. Although CVM indicated it is unlikely the lists of signs will be removed, CVM did indicate a willingness to explore ways to make the data more useful to veterinarians. With recent changes to the VICH Pharmacovigilance Guidelines and plans to implement an electronic AER system for animal drugs, there are many opportunities for the AVMA and CVM to work together.

Ethanol Digesters and Virginiamycin Resistance

The COBTA received a presentation on Antibiotic Residues in Distiller's Grains from Fuel Ethanol Production. There are concerns surrounding whether plants forming distiller's grains are following through with good manufacturing processes, as virginiamycin and other antibiotics have reportedly been found in distillers grains upon analysis.

NEWS

Change in leadership at FDA-CVM and FDA-CFSAN

January 7, 2008, Bernadette Dunham, D.V.M., Ph.D., who was deputy director of CVM, has assumed directorship of CVM; and Stephen F. Sundlof, D.V.M., Ph.D., who has served as director of FDA's Center for Veterinary Medicine (CVM) for over a decade, has been appointed as director of FDA's Center for Food Safety and Applied Nutrition (CFSAN). Congratulations to both AAVPT members!

ADUFA II

A tentative ADUFA II agreement currently exists between AHI and the FDA CVM. The agreement was developed in advance of the scheduled sunset of ADUFA in September

2008 and of reauthorization by Congress. The agreement provides both for funding of the ADUFA II by animal health companies and for agreed-upon performance standards by FDA CVM.

AAEP Drug Compounding Compliance Policy Guideline for Symposium

While all exhibitors must comply with applicable legal guidelines, compounding pharmacies are specifically directed to limit themselves to pharmacy practices as dictated by the FDA Center for Veterinary Medicine Compliance Policy Guideline. Any complete or partial mimicry of drugs and dosage forms of FDA-approved formulations will not be tolerated. Compounding pharmacies, or any other exhibitors, who violate this rule in any fashion will be subject to immediate removal from the exhibit hall by AAEP. Exhibits will be monitored to ensure compliance with this policy, and all decisions will be made in AAEP's sole discretion. Compounding pharmacies will be required to sign and return a compliance form to the AAEP office, prior to being accepted as an exhibitor. https://www.aaep.org/pdfs/exhibitor_prospectus_07.pdf

Skills and Competencies Required by Veterinary Pharmacologists: A Blueprint for Graduate Education in Veterinary Pharmacology in North America

The results of a workshop held at the AAVPT Symposium in Asilomar on competencies and skills needed for graduate pharmacologists was published in JVPT February 2008 - Vol. 31 Issue 1 Page 1-86. It is also available electronically at

<http://www.blackwell-synergy.com/doi/abs/10.1111/j.1365-2885.2007.00920.x>

FDA Issues a Notice of Proposed Rule Making Defining Small Number of Animals for Minor Use Designation

FDA-CVM is proposing guidelines for what constitutes a "small number of animals" for each of the seven major animal species as part of the MUMS legislation dealing with a minor use in a major species. The agency proposes defining "small numbers" as: 50,000 horses, 70,000 dogs, and 120,000 cats affected annually. For cattle, pigs, turkeys and chickens this roughly equates to 310,000 cattle, 1,450,000 pigs, 14,000,000 turkeys, and 72,000,000 chickens, respectively. An explanation of how these number were derived can be found at

<http://www.fda.gov/OHRMS/DOCKETS/98fr/08n-0011-npr.pdf>

FDA Investigation Leads to Several Indictments for Importing Contaminated Ingredients Used in Pet Food

The U.S. Food and Drug Administration announced that two Chinese nationals and the businesses they operate, along with a U.S. company and its president and chief executive officer, were indicted by a federal grand jury on February 6, 2008, for their roles in a scheme to import products purported to be wheat gluten into the United States that were contaminated with melamine. These contaminated products ultimately led to a recall of more than 1,000 pet food products and resulted in one of the most complex recalls FDA has ever dealt with.

<http://www.fda.gov/bbs/topics/NEWS/2008/NEW01792.html> .

DRUG & BIOLOGIC APPROVALS

E. coli O157:H7 Cattle Vaccine – Conditional License

USDA agrees to grant a conditional license to Bioniche for its *E. coli* O157:H7 Cattle Vaccine. The vaccine is the world's first vaccine that may be used as an on-farm intervention to reduce the amount of *E. coli* O157:H7 shed by cattle.

Bioniche Life Sciences Inc. (TSX: BNC), a Canadian biopharmaceutical company, received notice from the USDA that the latest data for its *E. coli* O157:H7 cattle vaccine "meets the 'expectation of efficacy' standard" and is eligible for a conditional license. The vaccine was tested at the University Nebraska-Lincoln, with efficacy results published most recently in the *Journal of Food Protection*, in November, 2007.

The conditional license, when granted, will provide the company full access to the U.S. market with two restrictions: At least one step in the manufacturing process must be performed in the United States and Bioniche will not be permitted to use a trademark name for the vaccine.

Spinosad (COMFORTIS)

COMFORTIS (spinosad) Chewable Tablets by Elanco & Co. is approved to kill fleas and for the prevention and treatment of flea infestations on dogs with once monthly dosing.

Emodepside and praziquantel (PROFENDER)

PROFENDER (emodepside and praziquantel) topical solution, by Bayer HealthCare, is approved for the treatment and control of infections caused by several internal parasites in cats.

Diclazuril (PROTAZIL)

PROTAZIL (diclazuril) Antiprotozoal Pellets, by Schering-Plough Animal Health Corp, is approved for the treatment of equine protozoal myeloencephalitis caused by *Sarcocystis neurona*.

POSITIONS AVAILABLE

Postdoctoral fellowship - University of Wisconsin-Madison

A postdoctoral research position is available starting July 2008 at the University of Wisconsin-Madison, Department of Medical Sciences. Research focus is on the relationship between individual variability in xenobiotic reductase pathways and the outcomes of drug toxicity and arylamine carcinogenesis. Currently employed methods include in vitro enzymology, HPLC, protein expression and purification, ELISA and flow cytometry, genotyping, and functional analyses of polymorphisms. Requirements for the position are a PhD in pharmacology, molecular biology, biochemistry, or a related discipline. Experience with HPLC and protein expression and purification is desirable. Funding is contingent upon eligibility for an NIH-funded training grant. Applicants should send a letter of intent, CV, and the names and email addresses of 3 references to: latrepanier@svm.vetmed.wisc.edu / Dr. Lauren A. Trepanier, Dept. of Medical Sciences, University of Wisconsin-Madison; 2015 Linden Drive, Madison, WI 53706-1102 USA (Ph) 608-265-9022 (Fx) 608-265-8020.

Jurox Research Program Manager

Jurox, an Australian-based Animal Health and Rural Industry company, has an open position for a research program manager. The position includes responsibility for research and development of pharmaceutical products, working within and leading teams which include chemists,

veterinarians, agricultural scientists and marketing personnel.

Ideal applicants will have a degree in veterinary science and either further research experience or alternate post-graduate qualifications in any discipline. Knowledge of GLP and GCP, experimental design and statistics and demonstrated skills in scientific writing would be an advantage. Excellent remuneration packages will be negotiated.

Applications or requests for further information should be sent to Dr. Ted Whittem, 85 Gardiner Road, Rutherford 2320, NSW, phone +61 (0)2 4931 8200, email jenq@jurox.com.au

Jurox Sales Manager International Business

Jurox, an Australian-based Animal Health and Rural Industry company, has an open position for an international sales manager. You will be responsible for executing the organization's long term globalization objectives for a range of veterinary products. In addition you will also handle a substantial export trading business.

The applicant should have English as their first language, and either be a resident of Australia or be prepared to relocate. A high degree of sensitivity and appreciation of the cultural nuance required to do business in a range of

different countries is required and the applicant should expect extensive periods of international travel.

With an expanding export base and growing domestic business, Jurox markets products throughout Australia, New Zealand, Asia and the Middle East. Jurox is now turning its attention towards Europe and North America.

You should forward your application or requests for additional information to Tony Cooley, Head of Sales & Marketing, 85 Gardiner Road, Rutherford, NSW 2320, phone +61 2 4931 8275, email jenq@jurox.com.au

AAVPT Newsletter

Editors: Cory Langston and Craig Parks

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