



Patron: Professor John Coetzee

#### AIMS OF THE AUSTRALIAN ASSOCIATION FOR HUMANE RESEARCH INC.

- To promote all viable methods of healing which do not at any stage involve the use of animals.
- To promote the use of scientific alternatives in all forms of medical, scientific and commercial research.
- To help disseminate evidence, as it becomes available, that the use of alternatives is less costly, more accurate and more humane than the use of animals in experiments.
- To work for the abolition of all experiments using animals.

## Welcome

As this is our first newsletter for the year, I wish you all a warm welcome to 2007. It's hard to believe that it's March already!

I'm particularly pleased to introduce you to two new additions to our team. Carrie Barnes and Emma Burgess commenced employment with AAHR last month. Both have extensive knowledge and a passion to oppose animal research. We are confident that we will be achieving a great deal this year with a number of major projects planned. We will of course let you know more as these projects develop.

Thank you to those members and supporters who have contributed to our inaugural Members' Forum section of the newsletter. We greatly appreciate the feedback, and the encouragement received from you all. It helps us to continue our fight despite it being a constant uphill battle. Keep it coming! Until next time,

*Helen Rosser*

### Website

Part of our plans for 2007 include extending our website to provide as much information to the public as possible. We are in the process of adding pdf versions of past newsletters, profiles of staff and Management

Committee, papers and speeches presented by AAHR and an online version of our DVD, Beyond the Cage.

Remember our web address is: **www.aahr.org.au**. Please visit us regularly there to see our updates.



### PDF Newsletters

Members and supporters now have a choice as to whether they prefer to receive their newsletters in hard copy or a pdf version via email.

Please let us know if you would prefer an email version and we will note in our records for future mailouts.

### Purple Vines

Due to a change in management at Purple Vines, the AAHR wine club is no longer operational. While you are still able to order wine directly from the company, AAHR will not be receiving the 15% donation as previously arranged.



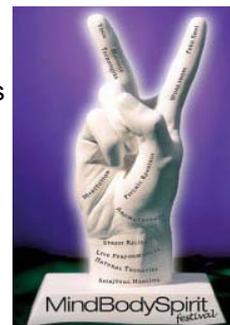
Emma Burgess  
Project Coordinator

Carrie Barnes  
Education Officer

### Upcoming Expos

Australia's largest exhibition of healthy living, the MindBodySpirit Festival, showcases the most comprehensive profile of wellbeing living options available in Australia. It brings together the best in natural therapies, & medicines, health products & services and personal and spiritual development.

AAHR will have a stand at the festival on Friday 8 June to Monday 11 June, 10am to 7pm daily, at the Melbourne Exhibition Centre, cnr Flinders & Spencer Streets, Melbourne



### Membership Fees

While these are not due until June, we'd like to inform members beforehand that membership fees will increase to \$25 per annum. This is to cover the costs of printing and mailing our newsletters and still remains much lower than many other groups' subscription fees.

## Adverse drug reactions.

70,000 adverse drug reactions (ADRs) are reported annually in Australia.<sup>1</sup> They can be caused by a number of reasons including errors in dosage, incorrect drugs prescribed or wrong method of administration. Many, however, result from misleading data obtained from animal tests. This means that a drug has been deemed “safe” through tests on animals, however those tests failed to predict outcomes in human patients.

*“...following the ‘successful’ completion of all the animal tests, more than 80% of new drugs fail when administered to healthy human volunteers during Phase 1 clinical trials.”*

*BM Bolton and T DeGregario, Nature Reviews Drug Discovery (2002) 1 (5): 335-336, quoted by Animal Aid in ‘Monkeying around with human health.’*

There are some well-known examples of this type of ADR. Thalidomide was tested extensively on animals yet failed to predict the thousands of birth defects in the 1950’s and early 1960’s when 10,000 children were born with missing limbs. Another case you may be aware of was the synthetic oestrogen DES (diethylstilboestrol) given to pregnant women in the 1950’s and 60’s to prevent miscarriage. DES was withdrawn in 1971 when it was linked to a vaginal cancer in female children and a higher risk of testicular cysts in male children. Even last year you may have heard of the six human volunteers in the UK becoming seriously ill after being administered with the genetically engineered drug TGN 1412 intended to treat inflammatory conditions, rheumatism and leukaemia. And there’s Vioxx, whose manufacturer Merck and Co is currently facing 13,000 lawsuits alleging that use of the drug caused heart damage. Of course all these drugs were tested on animals first.

While it’s only the extreme cases that attract heightened media attention, ADRs are a regular occurrence with (animal tested) drugs constantly being recalled or issued warnings after unexpected outcomes occur in human patients.

In just the past 12 months:

- Exanta, used to treat thrombosis, was withdrawn after being found to cause severe liver damage.<sup>2</sup>
- Ritalin and Dexamphetamine, treatments for attention deficit hyperactivity disorder, were identified as having caused strokes, heart attacks, hallucinations and convulsions in children as young as five.<sup>3</sup>
- Popular anti-inflammatory drug Voltaren was linked to 40 per cent increased risk of heart attack and stroke.<sup>4</sup>
- Pfizer’s experimental drug called Torcetrapib was trialled on 15,000 people, including 1,300 Australians in an attempt to increase HDL (good cholesterol). It was recalled in December 2006 after 82 deaths were reported.<sup>5</sup>

The Australian Adverse Drug Reactions Bulletin is published bi-monthly and provides information on drug recalls and reported side effects. Their December 2006 bulletin reported that while gallstones and alcohol are the most common causes of pancreatitis, medicines are estimated to account for 2-5% of cases. At the time of publication, ADRAC



(Adverse Drug Reactions Advisory Committee) had received 414 reports implicating 695 medicines.

In its October 2006 bulletin, ADRAC reported having received 659 reports of rheumatoid arthritis drug Leflunomide, causing neuropathy (a disease of the nerves causing weakness and numbness), and 265 reports of depression linked with the use of Ezetrol – another cholesterol treatment.

These are merely a snapshot of cases from the past year. AAHR maintains a database of “dangerous drugs” which records drug recalls and reports of side effects. A number of examples are also contained in our fact sheet ‘Medical Research’ on our website.

Crucial differences in molecular structure, metabolism, genetics and immunology between different species mean that we cannot accurately extrapolate data from one species to another. According to US Health and Human Services Secretary Mike Leavitt, “Currently, nine out of ten experimental drugs fail in clinical studies because we cannot accurately predict how they will behave in people based on laboratory and animal studies.”<sup>6</sup>

*“Most adverse reactions which occur in man cannot be demonstrated, anticipated or avoided by the routine sub-acute and chronic toxicity experiment [in animals].”*

*Animal Experiments: Bad Ethics Bad Science, quoting ZbindenG, 1966 Applied Therapeutics 8.*

Clearly, our continued reliance on animal tests is not the most effective way to determine the safety of drugs. It’s therefore imperative that we re-evaluate our testing methodologies and use processes that are applicable specifically to human conditions. In our next newsletter we will consider some of the alternatives that predict more accurate responses and are already either in use or under development overseas.

### (Footnotes)

<sup>1</sup> Monash University, Victorian College of Pharmacy, Prof. Michael Dooley, “Medicines: Friend or Foe?” 10/10/06.

<sup>2</sup> Exanta withdrawn after liver damage to patient, Times Online, UK, 15/2/06.

<sup>3</sup> Child drugs linked to heart attack, The Australian, 27/3/06

<sup>4</sup> Herald Sun, 14 September 2006

<sup>5</sup> Bloomberg 4/12/06.

<sup>6</sup> FDA Issues Advice to Make Earliest Stages Of Clinical Drug Development More Efficient. Press release / FDA 12jan2006

This year we will be introducing a number of new campaigns. We will keep you updated as usual via our newsletter and website. Some of our original campaigns continue, and the following is a snapshot of their current status:

### **Fetal calf serum.**



Several sources of alternatives to fetal calf serum (FCS) have been sent to research facilities around Australia. The feedback has been very positive. The following email (excerpt) was received from Professor George Yeoh, School of Biomedical & Chemical Sciences, University of Western Australia:

*"I am in complete agreement that as far as possible we should minimise, if we cannot*

*eliminate the use of fetal bovine serum for cell culture.*

*Apart from the ethics issue, there is also a scientific basis which is the difficulty faced in reproducing experiments which use high concentrations of FBS as well as the impossibility of fully defining media containing FBS.*

### **Pound animals**

During last year we were alerted to a number of council pounds in Queensland that were supplying their animals to research facilities. We've been liaising directly with the councils involved and contacted our members and supporters within the municipalities to collect petitions. If we are unsuccessful in our attempt to stop this unethical practice we will extend our campaign further to involve national protests.

### **Mouse Bioassay**

Last year we learned that the mouse bioassay was being used to measure toxicity caused by cyanobacterial (blue-green algae) blooms in some water catchments. We have been contacting water authorities and the responsible state departments to determine whether they use this very painful test and to inform them of the recently-validated alternatives. The testing is now almost always performed by non-animal methods, including the enzyme linked immunosorbent assay (ELISA) and chromatography methods, with mice bioassays rarely used.



### **Primate importation**

Petitions are still being collected and will not be submitted until we have a substantial number to present. Most signatures are being gathered at the expos we attend, but if you haven't yet collected any, please download a petition from our website or contact the office to obtain a copy or add your signature.

To our disappointment another permit has been issued to import live primates for research in the past year. We are currently liaising with the Faculty of Animal Husbandry at Bogor Agricultural University in Indonesia to learn more about the breeding of its macaques and how it maintains genetic diversity within a captive colony.

## Australian News

### **Alternatives used in Monash Anatomy teaching**

An article which appeared in "At Monash" newsletter November 2006 reported that Monash University's Anatomy department is implementing programs to teach anatomy through anatomical models and e-learning programs such as ADAM, Anatomedia and Primal, however they will continue to support dissection.

**Source:** *Personal correspondence from A/Prof. Nigel Wreford.*

**AAHR says:** *We queried this and were pleased when Monash responded that its dissection program is limited to human cadavers*

### **Volunteers to take part in Alzheimer's study**

The CSIRO is recruiting around 400 volunteers for its study known as Australian Imaging, Biomarker and Lifestyle. The volunteers will include both healthy people with no genetic risk and those with early stage Alzheimer's. Development of the disease will be tracked using Positron Emission Tomography.

**Source:** *The West Australian, 14 November 2006.*

**AAHR says:** *Many researchers have been frustrated that there does not seem to be an appropriate animal model that mimics the human condition of Alzheimer's disease. It is hoped that this recognition will soon be the case for all forms of human disease.*

### **Pig cell trials go abroad**

Australian biotech company, Living Cell Technologies, are planning to conduct drug tests for its treatment for type 1 diabetes in Russia. The drug is derived from neonatal pig islet (insulin-producing) cells and cannot be tested in Australia as the National Health & Medical Research Council has banned animal-to-human organ transplants until 2009.

**Source:** *Herald Sun, 31 January 2007.*

**AAHR says:** *Australia has acknowledged the health risks involved in xenotransplantation (animal-to-human transplants) and banned the practice for good reason. It is extremely unethical that this company is ignoring these risks and conducting dangerous research in a country that has less stringent legislation.*

### Scientists grow artificial liver

British scientists at Newcastle University have used stem cells from umbilical cords to grow an artificial liver. Dr Nico Forraz and Prof. Colin McGuckin made the miniature livers using techniques developed by NASA. They will be used for testing drugs and pharmaceuticals, removing the need for tests on animals.

Source: *Weekly Telegraph, Issue 798, 8 November 2006.*

**AAHR says:** *Not only will this eliminate animal suffering; it will hasten the development of new pharmaceuticals. Currently four out of five experimental drugs fail in clinical studies because animal tests cannot accurately predict how they will behave in people.*

### Virtual human metabolism created

Researchers at the University of California have used information from the human genome to construct a database of 3,300 metabolic reactions to create a virtual model of human metabolism.

The computer model will produce far more relevant results than animal research as it is constructed from human data which avoids the problem of species differences.

Source: *Dr Hadwen Trust – latest news, 4 February 2007.*

## Members' Forum

Animal experimentation is often considered to be a very technical issue with opponents often baffled by the scientific jargon used by animal researchers in an attempt to justify their work. For this reason we have, through the "Focus on..." section of our newsletters, attempted to provide sound information in lay terms to better equip our members to oppose the unethical and dangerous business of animal experimentation. Recent articles have included such topics as animal ethics committees, the 3R's, stem cell research, human tissue banks, clinical research, the REACH (Registration, Evaluation and Authorisation of Chemicals) proposals and, in this issue, adverse drug reactions.

We would like to hear whether you find this information worthwhile, or confusing, or whether there is a particular issue that you would like covered in future newsletters.

### Our first contributions:

When you moved to Victoria I was not sure if I should continue being a member you were so far away. I am glad I did. I love the new newsletter.

*Shirley Morrow, Mt Colah, NSW*

*Thanks Shirley, despite being located in Melbourne we are nevertheless a national organisation and attend interstate meetings, conferences and events as often as possible.*

There has been a lot of publicity about Peter Singer agreeing with infamous vivisector Tipu Azziz of Oxford University, that in some cases animal experiments can be justified. What is AAHR's view on this?

*Jo Davies, Sunbury, Vic.*

*The argument put to Professor Peter Singer was an overly simplistic equation – that the use of a small number of primates led to a significant health improvement*

### Animal experiments fail to predict outcomes in humans

A group of researchers has compared treatment effects from systematic reviews of clinical trials, matching the corresponding animal experiments results. The outcome, published in the British Medical Journal, revealed that only half of the sample tests analysed produced the same results in animals as they did in humans, concluding that "Discordance between animal and human studies may be due to bias or to the failure of animal models to mimic clinical disease adequately."

Source: *BMJ, doi:10.1136/bmj.39048.407928.BE (published 15 December 2006).*

### Dow Chemical Picks Computers Over Animals For Study

After years of careful negotiations with PCRM and PETA, Dow Chemicals has agreed to use a computer model to determine the penetration of a chemical placed on the skin, instead of forcing the chemical into the stomachs of rats. Because of this, 650 animals were saved.

Source: *Physicians Committee for Responsible Medicine, 4 December 2006.*

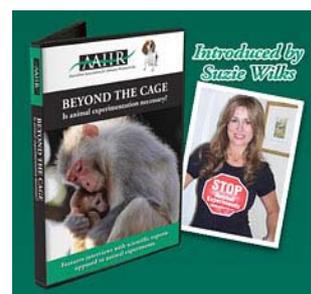
*in human sufferers of Parkinson's disease. Under the ethical framework advocated by Professor Singer – Utilitarianism – such an equation would be acceptable. Similarly, if a small number of humans were used in place of the primates this would also be acceptable.*

*Regardless of which ethical framework one subscribes to, the reality is never quite so simplistic and Professor Azziz's claim should not remain unchallenged. As far as we are aware, Parkinson's disease has NOT been cured, and while he claims that only a small number of primates have been used in the particular experiment he highlights, we may well question how many were used in previous research leading up to that particular stage? And how many experiments did not yield useful results? With the enormous number of animals used in research around the world, chances are some useful data will be discovered. As suggested by Dr John McArdle, "Historically, vivisection has been much like a slot machine. If researchers pull the experimentation lever often enough, eventually some benefits will result by pure chance." Such techniques in our opinion, do not constitute good science.*

### DVD Feedback

I just wanted to let you know I bought a copy of the DVD at the Cruelty Free Living Festival in Petersham and it is very impressive. I feel like I know what I'm talking about now and I wanted to say thank you for your hard work and dedication to the cause.

*Catherine Smith, Beecroft, NSW*



It was quite an eye opener to me and very thought provoking. Thank you.

*Chris Adams, Logan Village, Qld.*