

**Universities Federation
for Animal Welfare
News-Sheet, Spring 2013**

The International Animal Welfare Science Society

Letter from the Chairman

Welcome to the 2013 Spring News-Sheet. On behalf of the Council and staff may I thank Mike Bird, who retired from Council at the last AGM after eight years as Treasurer, for his expertise and service over the years.

UFAW has long had an international dimension to its work, its importance is again evident in many of the activities reported here: the successful completion of the William Russell Memorial Fellowship in the USA; assisting in the development of animal welfare science in Israel; the upcoming international symposium in Barcelona; and support of a variety of international projects from workshops at the 6th World Fisheries Congress to the production of a veterinary textbook in the Ukraine. Nearly half of all UFAW University 'LINKS' are now overseas, a reflection of the continued worldwide growth in animal welfare science and its beneficial impact on animals' lives, and of UFAW's important role in this.

My sincere thanks for your support of UFAW's work.



Lydia Bird



UFAW website on genetic welfare problems in companion animals

As gauged from the number of visits to it, interest in UFAW's website on genetic welfare problems in companion animals (www.ufaw.org.uk/geneticwelfareproblems.php) continues to grow. This is encouraging as we believe that better understanding of the welfare effects of the diseases that have arisen in selection for particular characteristics and conformations, is a key part of tackling the problems. To make progress requires the concerted efforts of many (for example in developing genetic tests and developing breeding strategies). UFAW's role is to promote understanding about the welfare effects. If anyone would like to help by distributing posters about the website or in other ways, please let us know.

Funding permitting, we hope to develop the website further in the coming year. Already the site is very large, covering many diseases and breeds. We are grateful to those who have contributed. The entry on brachycephalic airway obstruction syndrome (BOAS) in pugs is one that has been recently updated.

Angora Rabbit and Celestial Eye Goldfish

Garden Bird Health Initiative

UFAW set up the Garden Bird Health *initiative* (GBHi) in 2003. The surveillance and research project (based at the Institute of Zoology and involving UFAW, the BTO, RSPB, Defra, SRUC and many other individuals and organisations) that arose through this has been highly productive. The epidemic of trichomonosis in finches in the UK and continental Europe in recent years was identified and studied. Dr Becki Lawson (who was awarded her PhD for her work through the GBHi project) and her colleagues are now studying the current avian pox epidemic in tits - another new infection of garden birds. As the human population continues to increase, the ecosystem changes in many ways and we need to keep watch and to study the causes and factors underlying new diseases in the interests of trying to prevent any that have an anthropogenic (human-caused) basis. Facts about avian pox are at the GBHi website (<http://www.ufaw.org.uk/gbhi.php>).



*Great Tit (top, courtesy of David Wragg)
Dunnock (courtesy of Moss Taylor)*

Science in the Service of Animal Welfare: Priorities around the world

UFAW International Animal Welfare Symposium
Universitat Autònoma de Barcelona
Barcelona, Spain, July 4th-5th 2013



Around the world the importance of science in elucidating and tackling animal welfare problems is increasingly recognised, but priorities, concerns and approaches vary between nations and cultures. The aim of this international symposium is to provide a forum for all those active or interested in animal welfare science and its application around the world, to meet and discuss current topics in this field and international variation in priorities, concerns and approaches to animal welfare science.

Speakers will include

- Braithwaite V (Pennsylvania State University, USA)
The validity of parameters currently taken to be indicators of sentience
- Nicol CJ (University of Bristol, UK)
At what point is a chicken's welfare good enough? And is 'good enough', good enough?
- Perera BVP (National Wildlife Training Centre, Sri Lanka)
The welfare of free-living elephants as their habitat shrinks
- Winckler C (University of Natural Resources and Applied Life Sciences, Austria)
Progress in, the present state of, and challenges for on-farm animal welfare assessments in Europe

For a full list of those speaking at the symposium, please visit the UFAW website <http://www.ufaw.org.uk/conf.html>. In addition, there will be a large number of posters on a range of subjects from scientists around the world and a workshop on 'Building international links in animal welfare science'.

Registration details and further information about the meeting, including about the venue and accommodation, can also be found by visiting the symposium webpage.

Animal welfare research in Israel

UFAW SAWI PhD Scholar Roi Mandel has completed the first year of his interesting project on 'Determination of social behaviour patterns of dairy cows as early stage predictors of morbidity' at the Koret School of Veterinary Medicine of the Hebrew University of Jerusalem. This focuses on early detection of the onset of disease in dairy cattle so that treatment can be rapidly put in place.

It has been found that cattle like to be rubbed by an automated brush if it is suitably positioned where they can get access to it. Roi is studying the use of such a brush by dairy cattle and the factors that affect this, as it has been suggested that depression, (which occurs from the early stages of many diseases), is associated with anhedonia – decreased motivation for enjoyable activities. The cattle's level of interest in the pleasure of being brushed may give a new insight into how they feel under various circumstances and conditions. This work is being supervised by Dr Eyal Klement at the Koret School and Dr Becky Whay and Professor Christine Nicol at Bristol.



Dr Eyal Klement (left) and Roi Mandel of the Koret School of Veterinary Medicine of the Hebrew University of Jerusalem.

Congratulations

Many congratulations to Dr Robert Hubrecht, UFAW's Deputy Director, on being awarded an OBE in the New Year's Honours List for his services to animal welfare.

14th Annual Animal Welfare Student Scholars Meeting Harper Adams University College, December 2012

The annual Animal Welfare Student Scholarships (AWSS) proved another popular draw this year. Kindly hosted by Harper Adams University College, a large audience of students and staff from Harper and other institutions listened to an excellent series of presentations on the work carried out by those who had been awarded a scholarship in 2012. Amongst those presenting were Bernhard Schwed and Verena Grössbacher, two scholars from the Austrian University of Natural Resources and Applied Life Sciences, one of the universities in the UFAW 'LINK' scheme.

A wide range of subjects were covered in the talks including 'Assessing and reducing transport induced stress in horses' and 'Retrospective analysis of bovine caesarian section clinical outcome data'. The quality of the work and the talks was, once again, of a high standard. This was typified by Alice Fodder's study (Newcastle University) on the humaneness of argon as a method of rodent euthanasia. The new European

Directive on the use of animals in scientific research, which came into force in January, has for the first time included argon as one of the acceptable techniques for euthanasia but Alice's work shows that rats find argon aversive. More importantly, they find it significantly more aversive than the currently commonly used CO₂, indicating that argon should not be the first choice euthanasia agent in rats. Dr Claire Richardson also presented some of the findings of the work she carried out as part of her Three Rs Liaison Group doctorate on 'Refining research procedures by assessing distress in laboratory rodents'.

Thank you to all the student scholars who presented their work and those who attended. Particular thanks are extended to Dr Mark Rutter and Dr Louise Buckley (herself a previous recipient of a student scholarship in 2003) for their enthusiastic support for the meeting and efforts on UFAW's behalf. They were much appreciated.

Grants and Awards

UFAW has continued to support progress in animal welfare science in the UK and further afield through both the Small Project and Travel Awards and the Research and Project Awards. These award schemes are open to individuals and organisations worldwide.

One project that reached fruition during the past year was the compilation and publication of a veterinary text book for students at the Lviv National University of Veterinary Medicine and Biotechnologies in Ukraine. A number of conferences and workshops were supported, ranging from small symposia, such as the one organised by the students of the Cambridge University Veterinary Zoological Society: 'Veterinary conservation medicine: from individual to ecosystem', to major international meetings, such as the 6th World Fisheries Congress, which included an address by HRH The Prince of Wales and was attended by over 1400 people. UFAW supported two workshop sessions at this exploring the welfare of fish used in research and in aquaculture.

Among successful applicants for travel awards were Miss Yolande Seddon and Miss Rebecca Davenport. Miss Seddon travelled to Canada to present her PhD research at WAFL 2011. Yolande has since been offered, and taken up, a job in Saskatchewan, Canada at the Prairie Swine Centre as a result of the contacts that she made. The travel grant awarded to Miss Davenport enabled her to present the results of her research, on the

developing of an ex vivo organ culture model of the ovine skin-hoof interface, at the Prato Conference on the Pathogenesis of Bacterial Diseases of Animals, Italy. Rebecca was awarded the 'ARC centre for Excellence Encouragement Award' at the conference for her presentation.

Other young scientists supported by UFAW were Ms Amanda Gray (Oxford Brookes University) who investigated how to reduce stress and improve welfare for captive slow lorises rescued from the illegal pet trade in Indonesia through environmental enrichment, and Miss Louise Downs (Animal Health Trust) who has been involved with genetics projects, on 'Late-onset PRA is associated with a frameshift mutation in C2orf71' and 'A novel mutation indicates heterogeneous PRA in the Golden Retriever'. Louise presented findings at the 6th International Conference on Advances in Canine and Feline Genomics and Inherited Diseases, Sweden and she hopes that making the results of this work publically available will encourage and enable other laboratories to begin developing DNA tests for these mutations, which will in turn make DNA testing more accessible to the wider public and facilitate the breeding of healthy, disease-free pedigree dogs.

Photos from some of the 2012 Animal Welfare Student Scholarship projects, and Grants and Awards projects: thanks to (from top) CUVS; Amanda Gray; 6th World Fisheries Congress; Rachel Orrit (AWSS); Stephanie Bullough (AWSS); Verena Groessbacher (AWSS).



The UFAW University 'LINK' Scheme

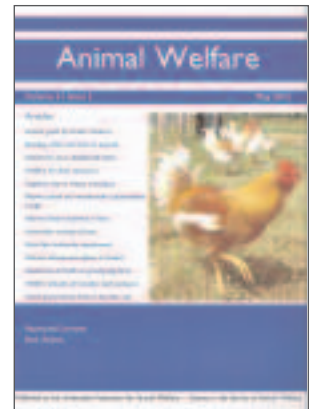
The UFAW University 'LINK' scheme is one of the ways by which UFAW disseminates information on relevant UFAW activities, awards and meetings. Through this scheme UFAW has provided funds to support seminars and meetings on animal welfare and helped fund the travel expenses of guest lecturers to speak on issues of current concern.

The number of 'LINKS' around the world is increasing. Students at universities where there is a 'LINK' person are eligible to apply for awards such as the UFAW Animal Welfare Student Scholarships that are otherwise restricted to the UK. Two students at BOKU, the Austrian University of Natural Resources and Applied Life Sciences, were amongst those that benefited this year from such a 'LINK'. They were awarded animal welfare student scholarships and attended the meeting at Harper Adams University College, along with their supervisor Dr Christine Leeb, to present their work.

If you are interested in becoming a 'LINK' person for your university please contact us (ufaw@ufaw.org.uk).

UFAW's journal, *Animal Welfare*

On 21st January 2013 we switched to using an on-line manuscript handling system. This means that all papers for the journal are now submitted electronically (at <http://mc04.manuscriptcentral.com/ufaw-aw>) and helpful robots then assist in the process of steering and hastening these through the peer review and editorial processes. The number of papers submitted to the journal continues to increase year-on-year.



The journal plays an important role in promoting and disseminating animal welfare science worldwide. Thanks to a very generous donation from the Persula Foundation, free subscriptions to the journal have been arranged for several universities that have not previously been able to take it. So far these are: Nanjing Veterinary School in China; the Veterinary School at Kasetsart University in Thailand; the Institute for the 3Rs, Konkuk University, Seoul, Korea; and Beni-Suef University in Egypt.

New UK legislation for animals used in research

The UK has now begun implementing the amended Animals (Scientific Procedures) Act 1986 which transposes provisions of the new European Directive 2010/63/EU.

Over the last year UFAW staff have, with other organizations, continued to meet with Home Office officials to discuss proposals for changes. In the coming year the Home Office will be producing guidance on the amended Act and we shall be monitoring this process to provide animal welfare advice where appropriate and helpful.

UFAW / Wiley Blackwell animal welfare book series



Two new books in the UFAW/Wiley Blackwell series have been published in recent months. 'Veterinary & Animal Ethics', edited by Christopher Wathes, Sandra Corr, Stephen May, Steve McCulloch and Martin Whiting, comprises the proceedings of the First International Conference on Veterinary and Animal Ethics that was held in September 2011 at the Royal College of Physicians in London. It includes 19 chapters covering a range of aspects (eg history, lessons from medical ethics, ethics in a market economy) and animal groups (eg companion, production and laboratory).

The latest book in this series: 'Animal welfare in veterinary practice' by James Yeates, is also now available.

Further details of books in this series are at: <http://www.ufaw.org.uk/public-list.php>. If you would like to write or edit a book for this series please let us know.

UFAW 3Rs Liaison Group

Assessing mouse welfare and replacing animals in emetic research

The UFAW 3Rs Liaison Group is a collaboration that UFAW has established between pharmaceutical companies, contract research organisations, animal breeders, and animal welfare organizations. The group funds studentships to research ways of improving the welfare of animals used in research in ways that are relevant to the pharmaceutical industry. Claire Richardson who worked on a UFAW 3Rs Liaison Group project on methods of assessing the welfare of laboratory mice used in cancer studies, gained a PhD for this work, and has now taken up a NC3Rs David Sainsbury Fellowship. UFAW thanks the members of this group for their continued support (for details of the group and its membership see <http://www.ufaw.org.uk/phhsc.php>).



Claire kindly agreed to present her work at a LASA/UFAW meeting on 28th September 2012 for laboratory animal science professionals. While she pointed out that automated systems for welfare assessment were typically expensive and should never replace good clinical observation by experienced staff, they could help with this and in the identification of humane endpoints. Other advantages of these systems are that they are objective, could be very sensitive, and provide a way of monitoring animals during the night.

In another project funded by this group, Professor Robin SB Williams (Royal Holloway University of London) and Professor Paul Andrews (St George's, University of London), and their student Stephen Robery have been working on the use of *Dictyostelium discoideum*, a soil-living amoeba, to screen potential drugs for nausea-inducing side-effects. Having shown that the amoeba responds to bitter compounds, they are now trying to gain a better understanding of the cellular mechanisms involved and to confirm the validity of the model for predicting effects in humans. UFAW has been assisting the researchers in finding collaborators with the aim of supplying compounds for which data on nausea/vomiting are available, providing advice on using the test in a pharmaceutical setting and on developing the test into a validated screen.

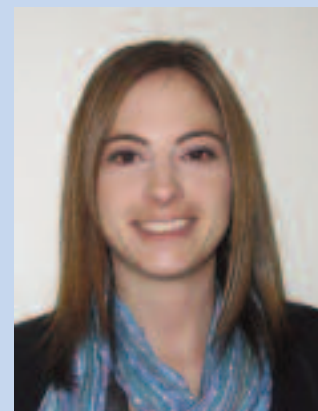
In a press release, Professor Robin Williams, Head of Biomedical Sciences at Royal Holloway, stated "If this all proves successful then using a social amoeba to test new chemical compounds could result in a large reduction in the number of animals currently used in emetic liability tests". This would be good news for the animals but also for pharmaceutical companies in terms of reduced costs and faster initiation of clinical studies. A better understanding of the molecular mechanisms of nausea and vomiting could also benefit other areas of human medical treatment such as the treatment of cancer.

Professor William Russell Fellowship

Reducing the number of mice used in research and improving the lives of those that are

In 2008 UFAW awarded a prestigious research fellowship to commemorate the life and work of Professor William Russell, who with Rex Burch, as UFAW fellows in the 1950's, developed the 3Rs principles that have had such an important impact on the welfare of animals used in research worldwide. The Fellowship was won by Professor Joe Garner of Purdue University, USA, who, together with his student Brianna Gaskill, studied whether providing nesting material to mice used in research results in practical benefits in terms of welfare and reduced physiological variability.

Dr Brianna Gaskill, who was awarded her PhD for her research on the subject, writes below about the important outcomes of this research.



Dr Brianna Gaskill

In 2008, Dr Joe Garner and I received funding under UFAW's inaugural Professor William Russell Fellowship to investigate the use of appropriate nesting materials to alleviate thermal stress in laboratory mice. This research, undertaken for my PhD at Purdue University under Dr Garner's supervision, aimed to validate the benefits of appropriate nesting material and to establish the causal chain from enrichment to improved well-being and Reduction and Refinement of mouse use.

Three related studies were undertaken within the research programme; the first established the amount of nesting material required to alleviate thermal stress; the second showed that provision of this material for nest building resulted in reduced energy requirement for thermogenesis (regulation of body temperature); the third, undertaken in collaboration with Charles River Laboratories, showed improved breeding performance with provision of nesting material – with potential to significantly reduce the number of breeding mice needed to achieve required levels of mice for scientific purposes. Currently six papers on this work have been published or are planned for publication.

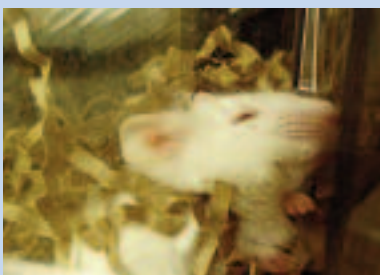


Photo courtesy Dr Brianna Gaskill

This research, and postdoctoral work now being undertaken by myself at Charles River, has led to the harmonisation of effective and validated nesting enrichment in Charles River's North American breeding facilities, potentially impacting the lives of millions of animals. It was a tremendous honour to undertake the work for the inaugural award commemorating the work at UFAW of Professor William Russell and Rex Burch, that ultimately led to the worldwide adoption of the 3Rs principles. Mice represent approximately 90% of the animals used in laboratory

research and I believe that it has and will lead to the significant refinement of mouse husbandry in laboratories, which in turn will lead to a significant reduction in their use.

Notification for election to Council at the 2013 AGM

In accordance with Article 46 of the Constitution, members' nominations for election to Council at the 2013 AGM must reach the UFAW office between 7th August and 4th September 2013. Further information is available from the UFAW Secretary.

2013 Annual General Meeting

This year's AGM will be held in the afternoon of Wednesday 16th October 2013 at the UFAW office (The Old School, Brewhouse Hill, Wheathampstead, Herts). Full details of the time and business of the meeting will be sent to members in due course.

Council changes at the 2012 Annual General Meeting

Michael Bird retired from Council. We extend our gratitude to him for his time and service to UFAW. We welcome Alick Simmons, Defra Deputy Chief Veterinary Officer, and Dr David Sargan, Senior Lecturer, Department of Veterinary Medicine, Cambridge University, who were elected to Council. Professor Richard Bennett, Dr John Bradshaw, Barbara Cooper and Professor Neville Gregory were re-elected to Council. Dr Lydia Brown became Chair and Professor Richard Bennett Vice-Chair.

Spring Appeal

to support the development of the University LINK Scheme at overseas institutions

The UFAW University LINK Scheme is an important way in which UFAW helps to foster the growing interest worldwide in animal welfare science and disseminates information about its activities. Each participating institution is represented by a person who distributes UFAW information and materials, and coordinates activities with students (see www.ufaw.org.uk/links-news-events.php for some examples of LINK activities).

The number of LINKs around the world is growing and, particularly in poorer countries or where animal welfare science is in its early days, the support the scheme provides can encourage and enable activities that might not otherwise be possible.

There are currently 23 overseas institutions participating in the scheme: UFAW is at the centre of a growing international interest in animal welfare science and with your help we can further promote the scientific approach to helping improve the quality of animals' lives throughout the world.

If you would like to contribute please send a donation to the Spring 2013 Appeal at the UFAW office address. Many thanks!

Thanks to all those who contributed to the Autumn 2012 Appeal in support of the UFAW genetic welfare problems website.

Other ways you can support the work of UFAW

UFAW's work relies on the support and generosity of members and donors, and this support is greatly appreciated. In addition to our Spring and Autumn Appeals, here are some other ways you can help promote animal welfare and animal welfare science:

Become a member

Individual membership is just £10 a year (£5 for students). Corporate membership from £20 a year.

Recruit a member

If you are already a member, why not recruit a colleague or friend?

Support the University Links

There are currently over 50 academic institutions worldwide represented. You can participate in their activities and help promote UFAW's objectives.

Subscribe to 'Animal Welfare'

The quarterly scientific and educational journal now has full online access and back issue search facility for subscribers.

Join our Regular Giving Programme

Regular monthly donations greatly help us to plan UFAW activities.

Pledge a gift in your Will

Over the years legacies have been extremely important to UFAW's work. An information leaflet on leaving a gift in your Will is available free from UFAW.

Sponsor an activity

There are frequent opportunities to sponsor particular activities, events or projects of interest to institutional or corporate organisations.

Shop at UFAW

Choose from our exclusive range of clothing, stationery, gifts and cards that also help promote UFAW. Ask for a brochure or visit www.ufaw.org.uk

For more information on any of these visit www.ufaw.org.uk or contact the UFAW office.

We were sorry to hear recently of the deaths of Professor Sir Colin Spedding CBE who died on 17th December 2012 and will be remembered with great respect for his kindness and wisdom, and Andrew James Madel, a member of the UFAW Council between 1989 and 1992, who died on 9th January 2013.



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