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A P&G Update on
Innovation in Alternative
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North American Animal Welfare and Alternatives Award Winners Announced by the Humane Society of the United States, P&G

In May 2007, the Humane Society of the United States and P&G sponsored the inaugural North American Animal Welfare and Alternatives Awards program. Recipients received a \$25,000 award to aid in furthering their work. Recipients of the 2007 Animal Welfare and Alternatives Awards are:

Prof. Elaine Faustman (University of Washington) received the Alternatives Award in recognition of her considerable contribution to research in the area of *in vitro* systems for the evaluation of environmental and occupationally relevant agents. Her work focused on developing new *in vitro* models for evaluating developmental and reproductive toxicity and holds much promise for furthering the “3Rs” goal of refining, reducing, and replacing animal use in testing. In addition to her role as professor of environmental and occupational sciences at the university, Prof. Faustman also serves as director of the Institute for Risk Assessment and Risk Communication (also located at the University of Washington). Prof. Faustman will apply the \$25,000 award to a research project focused on further refining a new 3-D Sertoli cell/gonocyte co-culture model through the use of genomic and nanotechnology methods.

Dr. Patricia Turner (University of Guelph) received the Welfare Award in recognition of her substantial contribution to laboratory animal medicine education and training of veterinarians at both undergraduate and postgraduate levels. Refinement and reduction of research animal use is greatly enhanced by the expertise of appropriately trained veterinary practitioners who are well placed to advise researchers on model selection and laboratory animal welfare. Dr. Turner is an associate professor in the Department of Pathobiology at the Ontario Veterinary College, University of Guelph. Her award of \$25,000 will be applied to support research leave to the OIE (World Organisation for Animal Health) in Paris where her work will focus on the development and implementation of an educational program for laboratory animal veterinarians in developing countries.

Texas Coalition for Animal Protection (TCAP) received the Innovations award in recognition of their grassroots effort to provide low-cost pet sterilization services to Texas animal shelters, animal welfare groups and pet owners. The Texas Coalition for Animal Protection is a nonprofit organization formed in 2000 to serve as a resource for Texas animal shelters and animal welfare groups. They opened their first low-cost pet sterilization program on November 19, 2002 in Denton, Tex. The program spayed 37 animals its first day of operation. The program now operates 2-4 days per week and sterilizes more than 500 animals per month. TCAP now works with organizations and community animal shelters to provide low cost pet sterilization in 14 Texas cities.

“We are honored by this highly prestigious award. Low-cost spay and neuter is hard work, but means great results for Texas residents and their animals. We look forward to using this grant to continue our work of reducing the number of unwanted kittens and puppies in Denton and surrounding areas.”

-- Stacey Taylor, executive director, Texas Coalition for Animal Protection

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From Cincinnati to New Orleans, Animal Welfare Groups Benefit from Equipment Donations

Given P&G's success in adopting the use of alternatives, the company has been able to substantially decrease the need for animal tests over the past two decades. As a result, the company has reduced its need for animal housing and animal care equipment in its facilities.

What happens to this surplus housing and equipment? Whenever possible, P&G looks for opportunities to donate this animal housing and animal care equipment to nonprofit organizations, such as local adoption shelters, spay/neuter clinics, and even zoos. In recent years donations have included:

- Animal housing, welfare enrichment items, and surgical equipment to a local zoo.
- Laboratory and office equipment to a Cincinnati hospital.
- Carts, leashes, pet toys, cleaning supplies, cages, vacuum cleaners, step stools, and numerous first aid supplies to a local pet adoption agency.
- Office equipment and counter tops to the local Boy Scouts of America council.
- Office furniture to a local fire department.
- Animal housing and kennel supplies to BARK of New Orleans, a non-profit animal shelter which aided animals left stranded in the aftermath of Hurricane Katrina.

As a company, P&G has a long-standing commitment of giving back to communities and helping charitable organizations. P&G used this opportunity to pass on its equipment to others who care for animals.

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Europe Goes Alternative Conference Highlights Progress of Past Year

Members of the European Partnership for Alternative Approaches to Animal Testing (EPAA), an unprecedented collaboration between the European Commission and 27 major companies from seven industry sectors, continue to lay the foundation for long-term progress.

At the second "Europe Goes Alternative" conference held in Brussels last December, EPAA presented its progress report for the previous year. During its first year in existence, the partnership was able to identify common ground for collaboration, to put in place a five-year action programme based on a preliminary and realistic assessment of needs, and to establish a structure for implementation of the programme drawing on the expertise of all member companies and Commission services.

Although the majority of initiatives involved long-term planning, a number of short-term objectives were initiated in 2006. For example, the first attempt to document all activities relating to the refinement, reduction, and replacement of animal tests, as well as the process leading to validation progressed rapidly. In future years this will be key to focusing research and avoiding duplication of efforts.

Similarly, a project to map all European legislation governing animal testing for safety assessment has identified a number of areas where collaboration between industry and regulators can enhance application of replacement, reduction, and refinement methods in safety testing.

EPAA includes participation from industry associations representing the pharmaceutical, crop protection, chemical, cosmetic, soap and detergent, and biotechnology sectors, as well as leading companies like P&G. Key objectives of the initiative are to identify barriers to progress and propose solutions that promote the development, validation, and regulatory acceptance of alternative approaches.

[Presentations](#) from the "Europe Goes Alternative" conference, in addition to EPAA progress reports, can be found on the EPAA [Web site](#). The next "Europe Goes Alternative" conference will be held in December 2007.

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In Pursuit of Alternative Toxicity Test, P&G Awarded Research Grant

With support from Cefic, the European chemical trade association, researchers at P&G are investigating whether certain fish or invertebrate embryos can be used as predictors of toxicity in mammals. The research holds the promise of opening the door to the development of additional alternative methods of testing toxicity.

The Long-range Research Initiative (LRI) focuses on filling gaps in current knowledge and further understanding of chemical risk assessment. The programme was initiated in 1996, with the goal of responding to public and stakeholder concerns over chemical safety through scientific investigation.

Today, the LRI funds research which addresses many of the environmental objectives of the European Union, including:

- Linking environmental factors to health effects.
- Understanding and reducing chemical risks to the environment.
- Improving animal testing in risk assessment.

The P&G project will evaluate the effects of chemicals on the function of signal transduction pathways, which are the molecular machinery that initiate cellular responses to signals from outside the cell. Signal transduction is critical for all aspects of life, and normal function of these pathways is necessary for development to take place. There are less than 20 signal transduction pathways and they are highly conserved across the animal kingdom. These pathways may represent important targets for chemicals that adversely affect development.

Because they are so highly conserved, it should be possible to use non-mammalian and even invertebrate organisms to detect effects on these pathways. Detecting the effects will be dependent on understanding the consequences of perturbing each pathway. Therefore, the project will use three well-characterized developmental biology models: embryos of zebrafish, the fruit fly *Drosophila*, and the nematode *C. elegans*.

The research will be led by George Daston, a research fellow at P&G's Miami Innovation Center in Ohio. Daston has more than 30 years experience in developmental toxicology research, including the development of *in vitro* replacement assays, and in understanding the molecular basis for normal and abnormal embryonic development.

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Moscow Seminar Spreads Awareness of Alternatives

To spread awareness in Russia of alternatives to animal testing, P&G collaborated with international experts in organizing a conference titled "Safety Assessment and Animal Alternatives Testing Methods" in Moscow last November.

In addition to representatives from P&G, experts from the European Centre for the Validation of Alternative Methods (ECVAM), the Organisation for Economic Cooperation and Development (OECD), Vrije Universiteit Brussel (VUB), the Humane Society of United States (HSUS), and the Institute for In Vitro Sciences (IIVS) were on hand to discuss their learnings on safety assessment based on alternative test methods. The seminar was also attended by representatives from the Russian Ministry of Industry and Energy, the Ministry of Health, and members of local industry associations.

The conference focused on three major discussion areas:

- The importance of the development of animal alternative testing methods, their validation, and use based on the European Union (EU) policy.
- The contributions of participating organizations to promote alternatives.
- The availability of existing alternative test methods to refine, reduce, or replace current methods.

Based on feedback from the participants, the seminar successfully reached its objectives of raising interest in:

- Understanding the EU's approaches to validation and adaptation of alternative test methods;
- Applicability of the "3 Rs" methodology – to refine, reduce, or replace the use of animals in product safety research, in accordance with the European Cosmetics Directive; and
- Providing new perspectives of the usability of alternatives in EU and Russia.

Presentations from the seminar can be found at <http://en.apcohm.org/static/materials.html>.

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P&G Scientists Highlight Their Alternatives Research at World Congress

Seventeen scientists from P&G and Wella attended the 6th World Congress on Alternatives and Animal Use in the Life Sciences in August, an event which drew more than 800 scientists from around the world. A total of 27 abstracts were presented, representing the efforts of 52 scientists from multiple sectors within P&G. These presentations spanned topics from basic research to uncover mechanistic approaches for the development of alternatives, to validation efforts, refinement of existing methods, enhancements in animal welfare practices, and development of approaches to reduce animal use in response to regulatory requirements. This range of activities highlights P&G's commitment to the development of alternatives and the many necessary steps to ensure methods are developed, validated, and applied to reduce or eliminate the use of animals in testing.

The P&G and Wella presentations included work conducted in partnership with more than 30 organizations from government institutions, industry, and academic and advocacy institutions. Participating government institutions included the Chinese Center for Control and Prevention, ECVAM, the European Commission, and ZEBET. Among the academic and advocacy organizations were ecopa (European Consensus Platform for Alternatives), Eurogroup for Animals, Humane Society of the United States, Institute for In Vitro sciences, Royal Society for the Prevention of Cruelty to Animals, Sungkyunkwan University, Vrije University Brussels, Louis Pasteur University, University of Barcelona, University of Nottingham, and the Veterans General Hospital Taiwan.

Plans are currently underway for the next World Congress, which will be held in Rome in September 2009.