

FRAME

Fund for the Replacement of Animals in Medical Experiments



ANNUAL REPORT

For the period 1 April 2002 to 31 March 2003

Highlights of the Year

The fourth FRAME Annual Lecture, *Reduction, Refinement and Replacement: Putting the Immune System to Work*, was given by Professor Ian Kimber (Syngenta, CTL) at the Royal College of Physicians, London, on 16 October 2002.

The FRAME Research Programme was 20 years old last year, and FRAME has produced a 24-page illustrated booklet describing the development and major achievements of its research activities. The Research Programme is being conducted both in the FRAME office and at the University of Nottingham Medical School, in the FRAME Alternatives Laboratory (FAL) and the Molecular Toxicology Laboratory. Work continues at the FAL to develop and further improve organotypic tissue culture models for the safety testing of cosmetics and toiletries, and substances that could affect the tracheo-bronchial tract. The FAL is also participating in an international interlaboratory collaborative trial to validate tissue culture methods for determining the acute toxicities of substances. The Molecular Toxicology Laboratory continues with a project to develop a high throughput screening system based on the use of heat-shock protein gene expression, and a new project on optimising the use of liver cells in culture.

A scientific collaboration is continuing with several pharmaceutical companies to minimise the use of laboratory dogs. FRAME also continues its work on assessing the scientific use of non-human primates, and a project to design and develop a Web site on humane endpoints has almost been completed. FRAME continues to contribute to research on several other important issues, including the use of genetically modified animals, food toxicity, endocrine disruptor and vaccine testing, the scientific use of cats, the validation of quantitative structure–activity relationship approaches, and the batch testing of Botox. One of the principal activities of FRAME has been in developing and implementing a FRAME initiative in response to a White Paper issued by the EU on the safety testing of chemicals. FRAME also contributed important information, and published its responses, to several major reports, including that of the House of Lords Select Committee on Animals in Scientific Procedures.

The launch of the FRAME initiative on chemicals testing and the 20-year anniversary of its research programme

were celebrated and publicised at a House of Lords reception on 26 April 2002, hosted by FRAME's patron, the Lord Soulsby of Swaffham Prior.

FRAME's two scientific committees (the Reduction Committee and the third Toxicity Committee) were active during the year. Members of the Reduction Committee continue to add to the information on the experimental design and statistical analysis of animal experiments, which has been put into the public domain. FRAME also organised a symposium on reduction, on 16–17 October 2002, at the Scientific Societies Lecture Theatre, London. The FRAME Toxicity Committee organised a workshop at the University of Nottingham on 11–12 December 2002, at which each of its working groups reported on progress.

FRAME scientific staff have participated in several workshops and meetings, in addition to those mentioned above, and gave a number of presentations and chaired workshops and symposia at the Fourth World Congress on Alternatives and Animal Use in the Life Sciences, held in New Orleans, on 11–15 August 2002.

FRAME continues to campaign on a number of issues concerned with animal experimentation, especially via the All Party Parliamentary FRAME Group at Westminster. FRAME also continues to publish its newsletter *FRAME News* and its informational and educational material. A *Focus on FRAME* educational leaflet on the use of human cells and tissues is in the final stages of preparation, and leaflets on the EU chemicals testing policy and on the use of primates are being written. The FRAME Web site, which includes copies of the Focus leaflets, a comprehensive guide on how to search for alternatives, and information on experimental design and statistical analysis of animal experiments, is being completely re-designed.

Personnel Changes

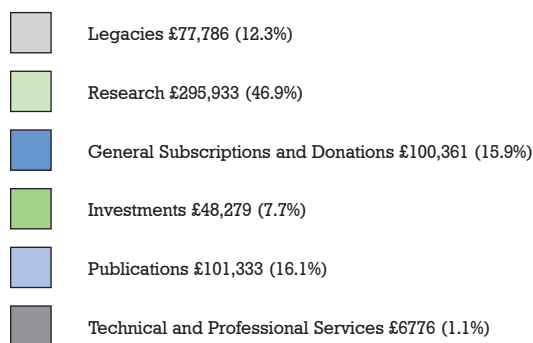
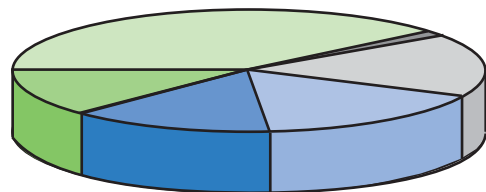
Dr Iwan Thomas left FRAME to become a freelance consultant, and Dr Elizabeth Jenkins left FRAME to work in industry.

Dr Jennifer Dandrea joined FRAME as a Scientific Officer.

Financial Review

Income 2002–2003

£630,468



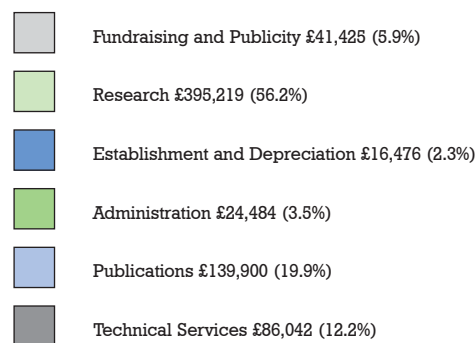
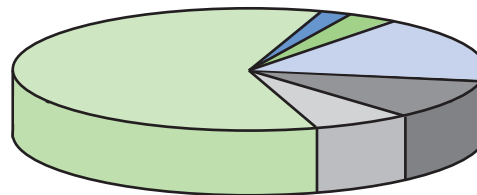
With total income increasing marginally compared with the prior year, and expenditure being reduced by 4%, the deficit before changes in investment values was reduced from £105,000 to £73,000. FRAME was again adversely affected by a further fall in income from legacies; income from this source fell to £78,000 compared to £146,000 in the prior year and an all-time high of £422,000 in the year to 31 March 1999. Much thought and effort have been devoted during the past several months to what steps can be taken to reverse this decline.

A scheme whereby smaller industrial supporters are invited to become corporate members of FRAME has been successfully further developed during the year, and income from this source increased to £41,000 during the year compared with a previous year level of £30,000. A further increase in income from corporate members is anticipated during the current financial year.

Financial support for FRAME's research effort has been maintained at a similar level to that of the previous year, but it must be acknowledged that the financial environment facing FRAME is becoming increasingly difficult. The pressure

Expenditure 2002–2003

£703,546



on companies to reduce costs and concentrate on factors which affect short-term share values is very apparent, and is making it increasingly difficult for FRAME to maintain income from the larger of its industrial supporters.

In common with other charities having investments in the stock market, FRAME experienced significant erosion of its asset values in the 12 months to the end of March 2003, with a fall in value of £124,000 of combined realised and unrealised losses.

Because of the difficult financial circumstances, further steps have been taken to reduce costs both at the FRAME offices and at its research laboratories at the University of Nottingham. With the exception of research undertaken on specific projects and for which specific funding has been arranged, the number of staff employed at the laboratory has been reduced to the minimum required to maintain an effective research activity.

Because of the excess of expenditure over income and the fall in investment values, FRAME's balance sheet total fell by just under £200,000 to £1.1 million during the year. FRAME does, however, have sufficient liquidity to meet its current and future commitments.

The Aims of FRAME

FRAME considers that the current scale of live animal experimentation is unacceptable and should not be allowed to continue. However, FRAME recognises that the immediate and total abolition of all animal experimentation is not possible, if vital medical research is to continue and the remaining diseases that lessen the quality of human and animal life are to be overcome, and if new consumer products, medicines, and industrial and agricultural chemicals are to be tested in order to identify potential hazards to human and animal health and to the environment.

FRAME advocates the Three Rs approach to this problem, believing that the most immediate prospects are for *reduc-*

ing the numbers of animals used through better science and better experimental design, and *refining* procedures so that the suffering of animals necessarily used is minimised, while the long-term aim of eliminating the need for live-animal experiments altogether, lies in the proper development, validation and acceptance of *replacement* alternative methods.

FRAME is a charitable trust, founded in 1969, and is controlled solely by up to six honorary trustees, who employ scientific and administrative staff to work in five main areas, namely: legislative and regulatory reform; scientific research; publications; specific campaigns; and public education.

FRAME Publications

- Balls, M.** (2002). Alternatives to animal experiments: "goodbye ECVAM, hello FRAME". *ATLA* **30**, 261–262.
- Balls, M.** (2002). Future improvements: replacement *in vitro* methods. *ILAR Journal* **43**, Suppl., S69–S73.
- Balls, M.** (2002). The establishment of ECVAM and its progress since 1993. *ATLA* **30**, Suppl. 2, 5–11.
- Balls, M.** (2003). Golden cows and sacred geese: it's all Greek to me. *ATLA* **31**, 1–2.
- Balls, M.** (2003). Animal experimentation as perceived by the citizens of Britain and France. *ATLA* **31**, 83–84.
- Balls, M., Clothier, R., Combes, R., Festing, M., Halder, M., Jukes, N. & Morton, D.** (2003). Some reflections on the 4th World Congress on Alternatives and Animal Use in the Life Sciences, New Orleans, Louisiana, USA, 11–15 August 2002. *ATLA* **31**, 53–62.
- Balls, M. & Combes, R.** (2003). Comments on the House of Lords Select Committee Proposal for the establishment of a Centre for the Three Rs. *ATLA* **31**, 47–51.
- Bottrill, K.** (2002). Monkey Business. *New Scientist (Letters, 14.12.02)*.
- Bottrill, K.** (2002). Information: needs for the future. *ATLA* **30**, Suppl. 2, 145–149.
- Bottrill, K.** (2002). The *New Scientist* and primate research: The strange case of Dr Jekyll and Mr Hyde? *ATLA* **30**, 565–566.
- Casati, S., Collotta, A., Clothier, R. & Gribaldo, L.** (2003). Refinement of the colony-forming unit-megakaryocyte (CFU-MK) assay for its application to pharmaco-toxicological testing. *Toxicology in Vitro* **17**, 69–75.
- Combes, R.** (2002). The EU White Paper: *Strategy for a Future Chemicals Policy* (an idea that must have seemed good at the time!). *ATLA* **30**, 1–3.
- Combes, R.D.** (2002). The ECVAM workshops: a critical assessment of their impact on the development, validation and acceptance of alternative methods. *ATLA* **30**, Suppl. 2, 151–165.
- Combes, R.D. & Balls, M.** (2002). Comments on the Report of the House of Lords Select Committee on Animals in Scientific Procedures. *ATLA* **30**, 605–615.
- Combes, R., Balls, M., Bansil, L., Barratt, M., Bell, D., Botham, P., Broadhead, C., Clothier, R., George, E., Fentem, J., Jackson, M., Indans, I., Loizou, G., Navaratnam, V., Pentreath, V., Phillips, B., Stemplewski, H. & Stewart, J.** (2002). An assessment of progress in the use of alternatives in toxicity testing since the publication of the report of the Second FRAME Toxicity Committee (1991). *ATLA* **30**, 365–406.
- Combes, R., Barratt, M. & Balls, M.** (2003). An overall strategy for the testing of chemicals for human hazard and risk assessment under the EU REACH system. *ATLA* **31**, 7–19.
- Combes, R., Schechtman, L., Stokes, W.S. & Blakey, D.** (2002). The international symposium on regulatory testing and animal welfare: recommendations on best scientific practices for subchronic/chronic toxicity and carcinogenicity testing. *ILAR Journal* **43**, Suppl., S112–S117.
- Clothier, R.** (2002). ECVAM's collaboration with academia. *ATLA* **30**, Suppl. 2, 175–183.
- Eisenbrand, G., Pool-Zobel, B., Baker, V., Balls, M., Blaauboer, B.J., Boobis, A., Carere, A., Kevekordes, S., Lhuguenot, J-C., Pieters, R. & Kleimer, J.** (2002). Methods of *in vitro* toxicology. *Journal of Food and Chemical Toxicology* **40**, 193–236.
- Halder, M., Balls, M., Hendriksen, C. & Cussler, K.** (2002). ECVAM's activities on biologicals. *ATLA* **30**, Suppl. 2, 125–128.
- Hammond, A.H., Garle, M.J., Sooriakumaran, P. & Fry, J.R.** (2002). Modulation of hepatocyte thiol content by medium composition: implications for toxicity studies. *Toxicology in Vitro* **16**, 259–265.
- Hartung, T., Balls, M., Bardouille, C., Blanck, O., Coecke, S., Gstraunthaler, G. & Lewis, D.** (2002). Good cell culture practice. ECVAM good cell culture practice task force report 1. *ATLA* **30**, 407–414.
- Jenkins, E.S., Broadhead, C. & Combes, R.D.** (2002). The implications of microarray technology for animal use in scientific research. *ATLA* **30**, 459–465.
- L'Huillier, N., Pratten, M.K. & Clothier, R.H.** (2002). The relative embryotoxicity of 1,3-dichloro-2-propanol on primary chick embryonic cells. *Toxicology in Vitro* **16**, 433–442.
- Morris, T., Goulet, S. & Morton, D.** (2002). The international symposium on regulatory testing and animal welfare: recommendations on best scientific practices for animal care in regulatory toxicology. *ILAR Journal* **43**, Suppl., S123–S125.
- Orr, S., Alexandre, E., Clark, B., Combes, R., Fels, L.M., Gray, N., Jönsson-Rylander, A-C., Helin, H., Koistinen, J., Oinonen, T., Richert, L., Ravid, R., Salonen, J., Teesalu, T., Thasler, W., Trafford, J., van der Valk, J., von Versen, R., Weiss, T., Womack, C. & Ylikomi, T.** (2002). The establishment of a network of European human research tissue banks. *Cell and Tissue Banking* **3**, 133–137.
- Vaughan, S.** (2002). Reduction. *The Regulatory Review* **5**, 15–17.
- Vaughan, S.** (2002). Scientific procedures on living animals in Great Britain 2001. *ATLA* **31**, 1–6.
- Vaughan, S.** (2003). Reduction — current status and future prospects. *ATLA* **31**, 63–65.
- Vaughan, S.** (2003). Comments on the *Sixth Report of the Animal Welfare Advisory Committee*. *ATLA* **31**, 207–212.
- Worth, A.P. & Balls, M.** (2002). The principles of validation and the ECVAM validation process. *ATLA* **30**, Suppl. 2, 15–21.

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The D M & J Wood Deposit Trust

Legacies Bequeathed to FRAME

Legacy income during the year totalled £77,786. FRAME received bequests from the following supporters:

Mrs Norah C B Barnaby of Ruthin
Miss Marjorie C E Coe of London
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Mrs Ethel J Gray of Bath
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Miss Lily M Murfitt of Poole

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Miss Lorna B Ritchie of York
Miss Betty J Roscoe of Exeter
Miss Kathleen M Slater of Seaford
Mrs Eileen Trump of Uckfield
Miss Dorothy M Whitehead of Middlewich

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These are companies which donate an annual sum of £10,000 or more. Corporate benefactors may collaborate with FRAME in specific or general research projects or contribute to the general funding of FRAME.

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The Boots Company plc
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Safeway Stores plc
J Sainsbury plc
Shell International Ltd
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These are companies which donate an annual sum of £2000–£10,000, either for a defined purpose or for general funding.

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British Association for
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Coty UK Ltd
CuDos Ltd
GlaxoSmithKline Ltd
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These are companies which donate an annual sum of £500–£2000 to the general fund. Such donations are of particular value in providing money for activities such as education and publicity, which do not involve research.

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Patron: Lord Soulsby of Swaffham Prior MA DSc PhD DVSM MRCVS.

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