

**ADVISORY COMMITTEE ON
GENETIC MODIFICATION**

**SECOND ANNUAL REPORT
(MARCH 2001)**

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ACGM's ROLE

1 Background

The First Annual Report (March 2000) of the Advisory Committee on Genetic Modification (ACGM) gave a brief historical background to ACGM. It explained the way ACGM had changed from its inception in 1984 to present day in order to keep pace with advances in the biotechnological field; with EC Directives; and, in particular, with the governmental review in May 1999 of the advisory and regulatory framework for biotechnology¹. The main thrust of the changes brought about by that review was the determination that the advisory system should be as open and transparent as possible - ensuring that the public could engage with the work of the government's advisory committees.

While ACGM was, in fact, already implementing most of the governmental review's 'best practice principles', readers of ACGM's First Annual Report may recall that further efforts to promote openness and transparency were nevertheless made. These took the form of, for example, the setting up of a register of members' interests; consideration of the possibility of an open meeting of ACGM where members of the public could attend; and finally the publication of the First Annual Report itself.

A further development in the life of ACGM has arisen this year. The Health and Safety Commission (HSC), which appoints ACGM, has begun an internal review of its own advisory committees. This has raised some fundamental questions for ACGM and is explained more fully below under the heading 'Revitalising HSC's Advisory Committees'. It has meant that for the first time in its history ACGM has been reconstituted for one year temporarily and its new members appointed for one year in the first instance in a bid to focus firmly on the best way forward for ACGM. It is, therefore, a very important time with major decisions to be made on ACGM's future direction, make-up and operation.

The main issue featured in this year's Annual Report consequently centres around the Committee's constitution and new membership. It is hoped that the unusual position that ACGM finds itself in this year is fully explained in this Second Annual Report. In addition, and as to be expected of an annual report, ACGM's work and that of its Technical Subcommittee (TSC) is described below and includes the proposed Open Meeting to be held in October 2001 since most of the consultation with various committee members and subsequent careful preparation has been an important part of this year's work.

¹ 'Regulatory Framework for Biotechnology: Report from the Government's Review'

Finally, for newcomers to ACGM and as a refresher for those already familiar with its work, a brief explanation of the terms 'Genetic Modification' and 'Contained Use' are given at 3 and 4 below.

2 Revitalising HSC's Advisory Committees

In mid-September 2000 HSC agreed to a major review of all of its advisory committees, of which ACGM is one. The review provides the Commission an opportunity to reflect on the scope and coverage of its advisory committees. A member of the review team was present at the last meeting of ACGM and members were invited to read a paper explaining fully the reasons for the review and were invited to comment on fundamental questions such as ACGM's remit, its constitution, the balance of its membership and length of membership, operating procedures and so on.

As part of the review process, HSC expects that a public discussion document will be released later this year. Time will be allowed to enable comment to be made and the final outcome is not, therefore, likely to emerge before early next year.

3 Genetic Modification (and Genetically Modified Organisms)

Genetic modification (GM) occurs where the genetic material of an organism (either DNA or RNA) is altered by use of a method that does not occur in nature and the modification can be replicated and/or transferred to other cells or organisms. Typically GM involves the removal of DNA, its manipulation outside of the cell, and reinsertion into the same or another organism. The aim of GM is often to introduce a new or altered characteristic to the organism being modified.

The organism which has been modified is referred to as a genetically modified organism (GMO). GMOs may be plants, animals or (most commonly) micro-organisms (including bacteria, viruses and fungi). Where the GMO is a micro-organism it is typically referred to as a genetically modified micro-organism (GMM).

An important point to note about GMOs is that in the case of humans, even if they have undergone genetic modification as a result of, for example, gene therapy, they are never GMOs. This is because humans are specifically excluded from the definition of an organism. The result is that the contained use legislation does not apply to humans.

4 Contained Use

ACGM's remit is limited to consideration of 'contained use'. Contained use is where control measures are used to limit contact between GMOs and humans and the environment so as to provide a high level of safety. In practice, this involves work in laboratories, animal houses, plant growth facilities (including growth rooms in buildings and suitable glasshouses) and large scale production facilities on industrial sites. All of these activities are regulated under the Genetically Modified Organisms (Contained Use) Regulations 2000. There are also controls on the environmental aspects of GM animals and plants under the Environmental Protection Act 1990.

Matters that do not fall under contained use and are hence outside of the remit of ACGM include:

- deliberate release of GMOs into the environment (e.g. crop plants in fields)
- food safety aspects;
- product approval/marketing approval.

ACGM also does not get involved in some areas closely related to contained use, but for which there are other specific advisory bodies. These include matters of animal welfare and patient safety (e.g. in relation to gene therapy). Whilst ACGM does not advise on patient safety with regard to gene therapy, where the therapy administers GMMs this has, to date, constituted a contained use and ACGM does advise on safety in relation to medical staff, patients' relatives and other close contacts of the patient.

ACGM's TERMS OF REFERENCE AND CONSTITUTION

The First Annual Report explained that reconstitution of ACGM was in fact due in June 1999. However, at that time consultation was underway on implementation of the revised EC Directive² on the contained use of genetically modified micro-organisms. Reconstitution would have disrupted the Committee during this important piece of work. The Health and Safety Commission (HSC) therefore extended the existing terms of appointment until 1 April 2000 for purely practical reasons. Nevertheless, it was recognised that revised terms of reference, constitution and procedure were needed and these matters were recommended and endorsed at the ACGM meeting held in October 1999.

5 ACGM's Amended Terms of Reference from April 2000

To advise the Health and Safety Commission and Executive, the Secretary of State, the Ministry of Agriculture Fisheries and Food (MAFF) Minister, the First Minister of the National Assembly for Wales and Scottish Ministers on all aspects of human and environmental safety of the contained use of genetically modified organisms. In developing its advice, ACGM shall take account of the work of the Food Standards Agency (FSA), the Human Genetics Commission (HGC) and, in particular, the Agriculture and Environmental Biotechnology Commission (AEBC).

It may be remembered that the new strategic advisory bodies in the form of FSA, AEBC and HGC came into being as a direct result of the 'Advisory and Regulatory Framework for Biotechnology: Report from the Government's Review'. The idea behind these newly formed bodies was that they would stay in touch with the work of the regulatory/advisory bodies like ACGM, consulting them as necessary, detecting cross-boundary issues and looking at the 'bigger picture' from a strategic viewpoint.

² European Directive 98/81/EC

It may also be noted that the amended terms of reference now take full account of the newly devolved power in Scotland and Wales. As will be seen from the list of members below, the newly formed ACGM has members from Scottish and Welsh research institutions. In addition, the channel for communication between ACGM and the devolved administrations is via assessors from the Scottish Executive and National Assembly for Wales who are invited to ACGM meetings and are in receipt of all ACGM papers, minutes, newsletters etc. These assessors also provide important links (as do other Departmental assessors) to the work of other biotechnology advisory bodies, enabling practical, governmental 'joined up' working to take place.

6 ACGM's Constitution from April 2000

Having highlighted already the overall interests of the new government commissions - the HGC and the AEBC - in conjunction with the FSA, and the close involvement of the devolved administrations in the work of ACGM, it now remains to describe the newly constituted membership and the reasoning behind the introduction of two new membership places.

As with all HSC appointed bodies, ACGM has been and continues to be constituted so that it is representative of the interests of both employers and employees (often referred to as the social partners). Until the newly constituted membership in April 2000, membership of ACGM had been by employer nomination (Confederation of British Industry (CBI)), Research Councils and the Committee of Vice Chancellors and Principals (CVCP) and employee nomination (Trades Union Congress (TUC)). In addition, independent members had been selected by the ACGM secretariat on the basis of their expertise and field of knowledge. Finally, one lay member was selected to perform a challenge function by questioning the science behind ACGM issues in the way that a member of the public might do.

It was recognised that this process of member selection did not fully fit in with Open Government and the 'Nolan' principles³. In view of this and in recognition of the broad principles outlined in the Advisory and Regulatory Framework for Biotechnology Report, changes to the membership structure were put forward to HSC. These minor but significant changes were in answer to the Report's call for 'the best available advice.....both scientific and non-scientific'. The new membership was selected by open competition whereby applications were invited and assessed by an appointments panel. (700 application packs were distributed and the ACGM secretariat received 26 applications for membership and 6 for chair). This time, in recognition of the growing importance of risk perception and communication in the GM field, relevant membership was sought in this particular area of expertise. As a result, in addition to employer and employee nominees and the independent scientific experts, an expert in the social science field of risk perception has now been appointed. A further lay member has also been appointed so that there are now two lay members to consider the issues before the Committee from the standpoint of the general public.

³ First Report on Standards in Public Life. May 1995

The vital contingent of independent scientific and technical experts does, of course, continue in the newly constituted ACGM. Collectively, ACGM members have expertise in virology, bacteriology, industrial production, safety management, ecology, GM animals and plants and public perception.

With regard to the Chair of ACGM, it should be explained that in the past this high profile position has been taken up by persons selected by the secretariat for their particular knowledge, independence and leadership skills. However, in view of HSC's current major review of all of its advisory committees, and in view of the consequent and unusual circumstance of reconstitution for only one year, a practical solution had to be found. It was decided not to select an external Chair until the review had been completed. This was no reflection on the quality of candidates, which was very high, but a wish to be able to offer a longer term appointment once things were more settled after the review had finished. In the meantime HSC has asked a senior HSE officer, Mrs Sandra Caldwell, Director of Health Directorate, to stand in as Chair.

7 This year's membership of ACGM

Current membership comprises 17 members including the chairman:

Member	Name	Nominated by/independent	Employed by
Chairman	Mrs Sandra Caldwell	HSE	HSE
Employer Nominees	Dr Gary Burns	CBI	Astra Zeneca
	Dr John Keddie	CBI	GlaxoSmithKline
	Mr Robert Osborne	CVCP	University of Glasgow
	Dr Bruce Whitelaw	Research Councils	Roslin Institute (Edinburgh)
Employee Nominees	Mrs Dot Carey	TUC	Retired (formerly of IVEM of Oxford)
	Dr Julian Kinderlerer	TUC	University of Sheffield
	*Dr Tom Loeffler	TUC	Biotechnology and Biological Sciences Research Council (BBSRC)
	Mr Roger Spiller	TUC	MSF
Independent Members	Dr P.Jonathan G.Butler		Medical Research Council
	Dr Robert G Dalziel		University of Edinburgh
	Mr Spyros Elia		Thomas Tallis

			School
	Dr Lynn Frewer		Institute of Food Research, Consumer Science Section
	Dr Penny Hirsch		IACR - Rothamsted
	Dr Janet Radcliffe Richards		University College London
	Professor Bert Rima		Queen's Univ., Belfast
	Dr Brian Robertson		Imperial College
	Professor Anthony Trewavas		Institute of Cell and Molecular Biology
	Professor David Wynford-Thomas		Univ.of Wales College of Medicine

*This position was vacant until, towards the end of the year, the TUC nominated its fourth member, Dr Tom Loeffler.

The Register of Members' Interests is given at Annex 1.

8 Technical Sub Committee

Since the summer of 1996 ACGM has been divided into two components - a main committee to take the broader view and a Technical Sub Committee (TSC) to consider the detailed science and provide in depth advice to the main committee and, for some matters, directly to HSE. In particular TSC has provided detailed advice on difficult notifications submitted under the Contained Use Regulations. Members of the TSC have also played a major role in the production of the ACGM Compendium of Guidance. The TSC is not appointed directly by HSC and its membership is more fluid than the main committee. Although there is a stipulation by HSC that the TSC must have an employer and an employee representative, the secretariat is otherwise free to appoint members. To do this, the secretariat tries to ensure that members represent the required range of expertise and can appoint additional members when necessary. At present the TSC has a Chairman, one employee representative nominated by the TUC and one employer representative nominated by the CBI and a number of independent experts. At present two members of the TSC are also members of the main committee. The TSC Chairman attends ACGM meetings as an ex officio member.

This year's membership has comprised the following 11 members including the chairman:

Member	Name	Nominated by/Independent	Employed by
Chairman	Mr Steve Vbranch	Independent	Jacobs Engineering
Employer	Mr John Thorley	CBI	Retired, formerly

nominee			Consultant
Employee nominee	Dr Julian Kinderlerer	TUC	University of Sheffield
	Dr J Cooper	Independent	NERC Centre for ecology and hydrology
	Mr S Eley	Independent	DERA Porton Down
	Dr P Hirsch	Independent	IARC -Rothamsted Soil Science Dept.
	Dr J Marshall	Independent	Oxford University Safety Office
	Dr S Mayer	Independent	Genewatch UK
	Dr P Minor	Independent	National Inst. for Biolog. Standards
	Dr R Randall	Independent	Univ. Of St Andrews. Biol. Dept.
	*Professor D Young	Independent	Imperial College. Dept. Med. Biology

*Towards the end of the year Professor Young resigned his position as TSC member and thanks go to him for his contribution to the work of the committee.

Over the last year the TSC had its 8th meeting (on 26 September 2000) and also met jointly with ACGM on February 13 2001 (ACGM's 44th meeting - this is described more fully below at '13'). The main focus of the 8th TSC meeting was the consideration of a number of technical issues including seeking technical advice on two recent notifications, inactivation of GMM waste and the consideration of particular types of experimental work with bacteria and viruses. Also put before the TSC was the matter of the setting up of a register of TSC members' interests (as is already in place for ACGM members). It was explained to the subcommittee that whilst it was not required to take this step, it would nevertheless be a good idea, in the spirit of openness and transparency, to publish members' interests. It was agreed that such a register should be drawn up.

ACGM's WORK THIS YEAR

As has already been discussed, ACGM's secretariat have spent much time this year working on reconstitution and on the appointment of new members for this interim period while we await the outcome of HSC's internal review. The work plan which was outlined in the First Annual Report was established as the projected plan for the period December 2000 to December 2003 (see Annex 2) and, indeed, work has continued broadly along those lines. The specifics are outlined below:

9 Implementation of the Contained Use Directive 98/81/EC

Perhaps the most important milestone for ACGM this year has been the signing of the new Genetically Modified Organisms (Contained Use) Regulations 2000 (SI2000/2831) on 17 October 2000. The Regulations, which are the culmination of over two years concentrated work by ACGM and its secretariat, were laid before Parliament on 25 October and finally came into force 21 days later on 15 November 2000.

The primary objective of the new Regulations is to maintain and improve the already high standards of safety for work with GMOs. Key improvements in control are:

- comprehensive new containment requirements;
- standardised risk assessment;
- an explicit requirement to inactivate all waste containing GMMs; and
- greatly increased openness.

10 Guide to the Genetically Modified Organisms (Contained Use) Regulations 2000

In addition to the publication of the Statutory Instrument containing the new Regulations, the new Guide to the Genetically Modified Organisms (Contained Use) - ISBN 0-7176-1758-0 - was also published. Like the earlier Guide that it replaces, this new guide explains in non-legal language the detailed requirements of the regulations and is specifically aimed at those working with GMOs under containment conditions. The Guide is a priced HSE publication (£13.50) and can be obtained from HSE Books, P O Box 1999, Sudbury, Suffolk, CO10 2WA.

A free leaflet (INDG86(rev2)) was also prepared and published outlining the legislation and giving departmental contacts for other legislation which may impinge on work with GMOs. The leaflet is also available from HSE Books.

11 ACGM Compendium of Guidance

The 2000 version of the Compendium is a completely revised and updated version of that issued in 1997 and was published in draft form on the Internet in March 2000. The final version (little changed) was released in hard copy in November to coincide with the coming into force of the new Contained Use Regulations and it reflects all the new requirements of the Regulations.

As stated earlier, the expertise of TSC in particular was drawn upon here in making this major revision. Sections dealing with risk assessment and containment measures have been added for GM plant viruses, GM animals, GM plants, animals infected with GMMs and plants infected with GMMs. These latter sections replace and expand on the old ACGM Notes 9 and 10 which had become very out of date over the last few years. Although it is now a priced publication (ISBN 0 7176 1763 7, Price £12.50, obtainable from HSE Books), the Compendium is still being produced in a loose leafed format.

The cost has been kept to a minimum and represents recovery of printing and distribution costs. In an effort to increase availability and accessibility the Compendium has also been placed on HSE's web site at:

<http://www.hse.gov.uk/biosafety/gmo/acgm/acgmcomp.htm>

12 Regional Seminars

One of the main elements of this year's work has been monitoring the introduction of the new Regulations and ensuring their 'bedding in'. In order to do this a series of eight regional seminars were conducted by the ACGM and TSC secretariats during the period from January to March 2001 in London, Edinburgh, Norwich, Sheffield, Cardiff and Birmingham. (A further and final seminar is planned to take place in Belfast in September 2001.) The seminars facilitated the introduction of the requirements of the new Regulations to the GM community and to any other interested parties. The seminars were open to anyone who cared to attend and a pre-prepared comprehensive Information Pack was distributed at each of the seminars. A generous amount of time was allotted for questions from the floor. The main bulk of questions centred around the following topics:

- waste inactivation methods - information requirements and the controls in relation to waste contractors;
- confidentiality in relation to work involving animals - concern for protection of personnel from possible attack by minority groups;
- notification of connected programmes, notifications of significant changes and who should make a notification in cases where more than one employer/organisation are involved; and
- derogations from full containment especially in relation to autoclaves in higher level containment facilities.

13 ACGM's 44th Meeting

The first meeting of the newly constituted ACGM was held on 13 February 2001. The newly appointed ACGM members attended a very unusual meeting in that it was a joint meeting with all the members of TSC and was chaired by a senior member of HSE staff - Mrs Sandra Caldwell, Director of HSE's Health Directorate. It was therefore an uncommonly large gathering of people. The meeting was used partly as a forum to explain to new ACGM members and to existing TSC members the whole review procedure that HSC's advisory committees were undergoing and the increased demand for openness. There followed from this a discussion about a proposed Open Meeting for members of the public to attend (see '15' below). In addition members were briefed on the operation of the new Contained Use Regulations and were informed that transitional provision notifications had been pouring in. They were also informed of the regional seminars that were still ongoing.

14 Increased Openness

With the underlying aim of making ACGM's work more open, transparent and readily accessible to the public, more innovative ways have been considered and adopted to disseminate information. Just as the newly revised ACGM Compendium of Guidance can be found on the Internet (see '11' above) so can much of the work of ACGM now be accessed by the general public in this way. Those main items which are publicly accessible are as follows:

- agendas (for both ACGM and TSC meetings);
- annotated agendas (produced after meetings to give minutes in note form alongside agenda items);
- newsletters;
- various papers e.g. Raison d'être paper (Committee papers are also available through HSE Infocentres);
- ACGM's terms of reference;
- ACGM's membership;
- ACGM's Register of Members' Interests;
- Notification Forms.

With regard to the Public Register (of premises and activities involving GM work in contained conditions), work has proceeded this year to update it and make it more readily accessible both in hard copy and, eventually, electronic version. An up-to-date hard copy version of the public register is now available at HSE main Area Offices (addresses of HSE's offices are given in general telephone directories under 'Health and Safety Executive') at head offices of HSE in London and Bootle, Merseyside. In Scotland, a copy of the register is maintained at HSE's office in Edinburgh. It should be noted that the Public Registers held at HSE Area Offices and in Edinburgh contain information on premises and activities that are specific to those geographical areas only. It is the Registers held in London and Bootle which are the 'master copies' and have a fully comprehensive list of all premises and notified activities for all geographical locations in England, Wales and Scotland.

There is still further work to be done before the Public Register is available electronically.

15 Open Meeting

Closely linked with the whole concept of openness is another major piece of ACGM's and the secretariat's work this year, namely the aim of holding an Open Meeting. The idea for this was first put to the newly constituted ACGM at its 44th Meeting in February 2001. Members were informed that HSC's Code of Practice for Advisory Committees encourages such committees to hold an annual open meeting for members of the public to attend. The form that the meeting should take is not however stipulated in the Code of Practice. As a matter of urgency, therefore, ACGM was asked to consider the

fundamental question of how to set about this task. Questions of timing, venue, and format together with careful consideration of the underlying aims of the meeting were raised. Consideration also had to be given as to how best to reach members of the public and provide them with the information they might be seeking. The question of security was also addressed given the perception of GM work by some pressure groups. The minutes of the 44th Meeting highlight the issues raised and discussed in connection with this idea of an Open Meeting.

ACGM was in favour of increased openness while at the same time judging that this process should be a stepwise one while experience is gained. The secretariat was asked to produce a paper including a risk assessment on the subject.

The Open Meeting has been set for Tuesday 30 October 2001. Exact details as to timing are yet to be decided. Once known they will be publicised widely.

16 ACGM Newsletters

ACGM Newsletter No. 29 was produced in October 2000. This was the first issue of the ACGM Newsletter since the new Regulations were signed by the Minister. It therefore emphasised that the advice given in past newsletters would no longer apply. It gave a lot of information on the new Regulations including transitional provision notifications, validation of waste inactivation, advice about confidentiality and more. It also alerted readers to the forthcoming seminars which were to take place in the new year.

CONTACTS FOR FURTHER INFORMATION

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GLOSSARY

ACGM	Advisory Committee on Genetic Modification
AEBC	Agricultural & Environmental Biotechnology Commission
CBI	Confederation of British Industries
CVCP	Committee of Vice Chancellors and Principals
EPA	Environmental Protection Act
FSA	Food Standards Agency
GM	Genetic Modification
GMM	Genetically Modified Micro-organism
GMO	Genetically Modified Organism
HGC	Human Genetics Commission
HSC	Health and Safety Commission
HSE	Health and Safety Executive
MAFF	Ministry of Agriculture, Fisheries and Food
TD	Technical Division
TSC	Technical Sub Committee (of ACGM)
TUC	Trades Union Congress

ANNEX1

REGISTER OF ACGM MEMBER'S INTERESTS

ACGM members have declared the following commercial and non-commercial interests deemed relevant to their appointment to the ACGM.

Note: Share holdings only declared if over £25,000

Member's Name	Interest
Chair	
Mrs Sandra Caldwell	<p>Employer:</p> <ul style="list-style-type: none"> • Health and Safety Executive <p>Commercial Interests:</p> <ul style="list-style-type: none"> • None <p>Non-commercial Interests:</p> <ul style="list-style-type: none"> • None
Employer Nominees	
Dr Gary Burns	<p>Employer:</p> <ul style="list-style-type: none"> • AstraZeneca <p>Commercial Interests:</p> <ul style="list-style-type: none"> • None <p>Non-commercial Interests:</p> <ul style="list-style-type: none"> • None
Mr Robert Osborne	<p>Employer:</p> <ul style="list-style-type: none"> • University of Glasgow <p>Commercial Interests:</p> <ul style="list-style-type: none"> • None <p>Non-commercial Interests:</p> <ul style="list-style-type: none"> • None
Dr C Bruce A Whitelaw	<p>Employer:</p> <p>Roslin Institute (Edinburgh)</p> <p>Commercial Interests:</p> <ul style="list-style-type: none"> • None <p>Non-commercial Interests:</p> <ul style="list-style-type: none"> • Most research is funded by the BBSRC. Currently some research is funded through a consortium of Pharma Companies (AstraZeneca;

Member's Name	Interest
	<p>Novartis; Novo Nordisk; Pfizer SmithKline Beecham and Wyeth) - approx funding 200K per annum.</p> <ul style="list-style-type: none"> • Editor of internationally peer reviewed scientific journal, Transgenic Research, published by Kluwer (Netherlands).
Dr John R Keddie	<p>Employer:</p> <ul style="list-style-type: none"> • GlaxoSmithKline <p>Commercial Interests:</p> <ul style="list-style-type: none"> • GlaxoSmithKline Shares held by Dr Keddie and his spouse. <p>Non-commercial Interests:</p> <ul style="list-style-type: none"> • None
Employee Nominees	
Mrs Dot Carey	<p>Employer:</p> <p>Retired (Formerly of IVEM of Oxford)</p> <p>Commercial Interests:</p> <ul style="list-style-type: none"> • None <p>Non-commercial Interests:</p> <ul style="list-style-type: none"> • None
Mr Roger Spiller	<p>Employer:</p> <ul style="list-style-type: none"> • MSF(Management, Science, Finance) <p>Commercial Interests:</p> <ul style="list-style-type: none"> • None <p>Non-commercial Interests:</p> <ul style="list-style-type: none"> • None
Dr Julian Kinderlerer	<p>Employer:</p> <ul style="list-style-type: none"> • University of Sheffield <p>Commercial Interests:</p> <ul style="list-style-type: none"> • Occasional consultancy to UNEP and UNIDO re GMOs. <p>Non-commercial Interests:</p> <ul style="list-style-type: none"> • Adviser to UNEP, UNIDO and various governments including Namibia and South Korea on safe use of GMOs.

Member's Name	Interest
Dr Tom Loeffler	<p>Employer:</p> <ul style="list-style-type: none"> • Biotechnology and Biological Sciences Research Council (BBSRC) <p>Commercial Interests:</p> <ul style="list-style-type: none"> • None <p>Non-commercial Interests:</p> <ul style="list-style-type: none"> • None
Independent Members	
Dr Lynn Frewer	<p>Employer:</p> <ul style="list-style-type: none"> • Consumer Science Section, Institute of Food Research <p>Commercial Interests:</p> <ul style="list-style-type: none"> • None <p>Non-commercial Interests:</p> <ul style="list-style-type: none"> • BBSRC - CASE award with Unilever - in the area of food risk communication.
Professor Anthony Trewavas FRS	<p>Employer:</p> <ul style="list-style-type: none"> • Institute of Cell and Molecular Biology <p>Commercial Interests:</p> <ul style="list-style-type: none"> • None <p>Non-commercial Interests:</p> <ul style="list-style-type: none"> • Helps administer a grant from AKFADIX (California) to five plant science academic staff in the University of Edinburgh. No payment or research support is received from this grant. The grant is for a gene discovery programme. • On the Governing Council of the John Innes Centre
Dr P. Jonathan G. Butler	<p>Employer:</p> <ul style="list-style-type: none"> • The Medical Research Council, Laboratory of Molecular Biology

Member's Name	Interest
	<p>Commercial Interests:</p> <ul style="list-style-type: none"> • None <p>Non-commercial Interests:</p>
Dr Robert G Dalziel	<p>Employer:</p> <ul style="list-style-type: none"> • University of Edinburgh. <p>Commercial Interests:</p> <ul style="list-style-type: none"> • None <p>Non-commercial Interests:</p> <ul style="list-style-type: none"> • Project Grant."Characterisation of a model of Post Herpetic Neuralgia". SmithKline Beecham (USA) £135,000 for two years from 1/8/00.
Dr Brian D. Robertson	<p>Employer:</p> <ul style="list-style-type: none"> • Imperial College of Science, Technology and Medicine. <p>Commercial Interests:</p> <ul style="list-style-type: none"> • None <p>Non-commercial Interests:</p> <ul style="list-style-type: none"> • None
Dr Penny Hirsch	<p>Employer:</p> <ul style="list-style-type: none"> • IACR - Rothamsted <p>Commercial Interests:</p> <ul style="list-style-type: none"> • None <p>Non-commercial Interests:</p> <ul style="list-style-type: none"> • BBSRC - CASE studentship. • Industrial sponsor Syngenta, to start 2001 (Syngenta give some support to the student, none to Rothamsted or D Hirsch).
Professor Bert Rima	<p>Employer:</p> <ul style="list-style-type: none"> • Queen's University Belfast <p>Commercial Interests:</p> <ul style="list-style-type: none"> • Consultant to Lovells (65 Holborn Viaduct, London <p>Non-commercial Interests:</p> <ul style="list-style-type: none"> • Assistant Director in Research in the Northern Ireland Health and Social Services Research and Development Office. (Seconded from the University 50% of his time). • Director of Ulidia Housing Association Limited in Northern Ireland.

Member's Name	Interest
Dr Janet Radcliffe Richards	<p>Employer:</p> <ul style="list-style-type: none"> • University College London <p>Commercial Interests:</p> <ul style="list-style-type: none"> • None <p>Non-commercial Interests:</p> <ul style="list-style-type: none"> • Member of the International Forum for Transplant Ethics, which receives moderate funding from Novartis.
Mr Spyros Elia	<p>Employer:</p> <p>Thomas Tallis School</p> <p>Commercial Interests:</p> <ul style="list-style-type: none"> • None <p>Non-commercial Interests:</p> <ul style="list-style-type: none"> • None
Professor David Wynford -Thomas	<p>Employer:</p> <ul style="list-style-type: none"> • University of Wales College of Medicine <p>Commercial Interests:</p> <ul style="list-style-type: none"> • None <p>Non- commercial Interests:</p> <ul style="list-style-type: none"> • None

ACGM FUTURE WORK PROGRAMME DECEMBER 2000 - DECEMBER 2003

1. Continuing to give advice on issues arising from notifications made under the Regulations.

- w ACGM's TSC will continue to scrutinise individual notifications where additional technical expertise is needed.

2. Monitoring the introduction of the new Contained Use Regulations.

This will include:

- w advising on interpretation;
- w advising on issues that should be considered by the European Commission;
- w advising on completion of the EC exemption criteria and guidance on 'safe' GMMs. Later, ACGM may be involved in the assessment of dossiers put forward to the European Commission under this exemption;
- w advising on the completion of the EC guidance on risk assessment.

3. Updating & revising the ACGM Compendium of Guidance (ongoing - both in relation to technical advances and legislative change).

- w providing advice on updating the Compendium to ensure that it is in line with current legislation, especially in terms of risk assessment procedures and containment requirements;
- w ensuring that the guidance in the Compendium continues to reflect the latest scientific developments. The TSC will provide detailed technical advice to the ACGM as part of this work.

4. Advising on likely scientific and technical developments and their implications for planning and policy making.

- w These considerations may also highlight areas of research.

5. Advising on UK strategy in wider international discussions and initiatives.

6 Considering whether and how ACGM can inform public perception of biotechnological risk.

- w This is part of a much wider debate within all biotechnology Advisory Committees which advise Government. Transparency of decision making and other openness issues will be key. ACGM will be asked to input into the many relevant initiatives which are already underway across Whitehall.

7. Production of the ACGM annual report