



Supervision of students undertaking GM work

1 GENERAL INTRODUCTION

This Safety Note deals with University procedures for ensuring compliance with the law for students engaged in activities involving genetically modified organisms (GMOs), whether they are genetically modified microorganisms (GMMs) or genetically modified higher organisms (GMHOs).

Once the project has been approved, a list showing the names of the supervisors/demonstrators should be sent to Health & Safety Services **before** the series of practicals start. These details should include information on the experience of the supervisors and demonstrators in GM techniques. As the details of student numbers, *etc*, will change from year to year, the project proposer should state the minimum levels of demonstrator or supervisor numbers that will be required, and their required level of experience in GM techniques. (For projects involving GMMs (including the use of cell cultures), the recommended ratio is one demonstrator to 5 students. The class supervisor(s) is/are included in this ratio.)

- **Changes to existing approved projects**

Unless the original approved project was approved as a “low risk” project, changes to existing class teaching projects need to be notified to SCBS as an extension to an existing project. It would be advantageous to convert the project to a generic “low risk” project at this stage, to avoid the need to notify further changes.

- **Existing approved projects**

A copy of the list of the names of the student participants involved should be sent to the Health & Safety Services office (copied to the Area Health & Safety Co-ordinator or GM administrator) each year for record keeping purposes. Any changes in the allocated demonstrators, class supervisor(s), *etc*, should be similarly notified to the Health & Safety Services office before the class starts.

- **Annual review**

Project supervisors are reminded that all GM projects, including those specifically designed as teaching projects, are included in the Annual Review process. For details, see Safety Guide 15, section 9.8)

2.2 Undergraduate GM research projects

Undergraduates may participate in approved GM projects in their Department, or could (with appropriate guidance from a prospective supervisor) suggest their own project. Prospective supervisors should take note that such proposals must be submitted in good time to SCBS to allow the assessment and approval process to proceed (see below).

- **Existing approved projects**

Normally, undergraduates may only be involved with Class I GM projects (or the equivalent for higher organisms. Exceptionally, SCBS may approve (on a case-by-case basis) the involvement of undergraduates on **a previously-approved higher risk (Class 2) project**. The Project Supervisor must submit adequate documentation to support any such case that he/she wishes to make for such involvement. This documentation must provide evidence regarding the safe operation of the project, i.e, to show that the risk assessment submitted with the project application remains valid. If SCBS were to approve, the Supervisor must ensure that any conditions attached to the approval by SCBS are fully observed, and enforced if necessary. Any students permitted to work on such projects must be demonstrably competent in basic “good microbiological practice techniques, and be subject to a high level of supervision. They must be subject to the full health registration and surveillance procedures.

Under no circumstances would undergraduates be permitted to work on a Class 3 project.

- **New or revised project proposals**

A student may suggest his/her own Class 1 GM project for a final-year research project. In this case, the details of the project must be fully discussed by the student with his/her supervisor, taking into account cost and space implications as well as the timescale of the approval process. The supervisor would be named as the project supervisor on the application form, and would be deemed to be in day-to-day control of the research project. A minimum of **4 weeks** must be allowed to allow the assessment process to be completed. All low risk GM projects can be given “BSO approval pending the next full meeting of SSGM.

- **Supervision**

All undergraduate students involved on GM research projects must be directly supervised by a

properly trained and competent member of the project team. The na

4 PROCEDURAL SUMMARY

1. A GM project intended for undergraduate use must have been approved by SCBS as being suitable for this purpose. Normally, such projects would be Class 1 for GMMs or the equivalent for higher organisms.
2. Only low-risk projects (Class 1 for GMMs, or equivalent for higher organisms) are suitable for fully-supervised class practical classes. There must be a high level of supervision by staff with previous experience of genetic modification work.
3. Student involvement in GM research projects is normally limited to low-risk projects. All students involved on research projects must be registered as undergraduate GM workers and subject (where required) to the full University requirements for health surveillance.
4. In exceptional circumstances, SCBS may approve the involvement of undergraduates on higher risk projects, but any such approval would be on a case-by-case basis. Any conditions attached to such an approval by SCBS must be fully observed, and enforced by the Supervisor if necessary.
5. Under no circumstances will undergraduates be permitted to work on a Class 3 GM project.
6. All students involved with GM activities must be given sufficient information, instruction and training to enable them to comply with the law. If an individual is unable to attend one of the training sessions organised by Health & Safety Services (for example, because of time constraints), the responsibility for ensuring that he/ she is familiar both with legal requirements and University procedures is devolved to the Supervisor.
7. Students must be listed, or registered with Health and Safety Services as “undergraduate GM workers” as appropriate.

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