

# Research Contingency Plan

## **Section 1: Summary:**

### **Section 2: Emergency procedures:**

*(Procedures to be followed in the event of the following serious incidents)*

Fire:

Bomb Alerts and threats:

Serious accident and injury:

### **Section 3-1: Key personnel GDSC**

Laboratory Manager	G. Frost	8065
Safety Officer, Fire Officer	G. Frost	8065
Radiation Safety Officer	G. Frost	8065
Biological Safety Advisor	P. Jeggo	8482
Biological Safety Officer	G. Frost	8065
First Aid Officer	G. Carpenter	3118
Director	A. Carr	8122
Deputy Director	K. Caldecott	8120
IT co-ordinator	B. Broughton	7518
IT co-ordinator (Deputy)	A. Herbert	8368
Unit Administrator	G. Wheatley	8123

### **Section 3-2: Key Contacts in University of Sussex**

Security Office:	3333
Rescue Team:	3333
Health and Safety Office (Hastings Building)	7347
Building Supervisor (School of Life Sciences)	8053
Director of Estates and Facilities Management Group (Hastings Building)	8144

### **Section 4: Contingency Plan**

*(Procedures for implementing the restoration of vital services)*

1. Water and drainage
2. Power
3. IT, links to JANET - Internet.
4. Building security
5. Glassware handling, laboratory equipment
6. RO water system
7. Snow and Ice

### **Section 5: Recovery plan**

*(Assessment of impact of major incidents and how to recover operation subsequently)*

1. Loss of premises or part thereof due to contamination, fire or other damage.
2. Catastrophic loss of Liquid Nitrogen storage vessels
3. Sustained loss of RO grade water
4. Loss of the GammaCell Irradiator

## Section 2: Emergency procedures

### **Fire:**

#### On discovering a fire:

Press red alarm. This will activate alarm and **automatically call fire brigade**. In the unlikely event that this fails, telephone 3333 to contact the University Security Office. Tell them your situation, name, room number and building (locally known as “Genome Building”)

If there is no threat to your safety and you have received training in the use of fire extinguishers, attempt to extinguish fire using the fire fighting equipment provided on each floor.

#### Evacuating building:

On activation of the alarm, the building will be evacuated.

If the alarm fails to activate, contact the Fire Warden (Graham Frost G4-07, Tel. 8065).

*Out of working hours:* Using the logbooks at each entrance (do not access these through the building, use external route) evaluate the number and possible location of occupants. When the University Security Team arrive, present them with the knowledge you have gathered.

### **Bomb Alerts and threats:**

The University of Sussex circulates warning of potential increased threats and advice appropriate to the situation. This will be circulated by the admin office and should be read carefully.

#### If you find a suspect package:

Evacuate the room and call 3333 to contact the University Security Office. Tell them your situation, name, room number and building (locally known as “Genome Building”). Follow their instructions re potential evacuation.

**DO NOT ATTEMPT TO MOVE PACKAGE**

### **Serious accident and injury:**

The University of Sussex has a trained rescue team.

#### If you discover a major accident or serious injury:

*During working hours:* The local First Aid Officer is Gill Carpenter (Lab: G4-18. Tel:3118). Ensure a colleague attempts to contact her. The Safety Officer is Graham Frost (G4-07, Tel. 8065). Ensure a colleague attempts to contact him. Immediately Call 3333 to contact the University Security Office. Tell them the situation, name, room number and building (locally known as “Genome Building”) and request the Rescue Team. University Security will contact the ambulance service.

**Section 3-1: Key personnel GDSC**

<b>Laboratory Manager</b>	Graham Frost	G4-07	8065
<b>Safety Officer, Fire Officer</b>	Graham Frost	G4-07	8065
<b>Radiation Safety Officer</b>	Graham Frost	G4-07	8065
<b>Biological Safety Officer</b>	Penny Jeggo	G3-02	8482

The Safety and Radiation Safety Officer is your first internal point of contact if you have a spillage, major injury, discover a fire or otherwise feel any threatening event has occurred or is anticipated to occur.

The Safety Officer, along with nominated floor fire wardens will ensure evacuation in the event of an alarm

<b>First Aid Officer</b>	Gill Carpenter	G4-18	3118
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The First Aid Officer (a trained Emergency Transport Attendant) is your first point of contact for minor injuries and should always be informed of a major incident as soon as possible.

<b>Director</b>	Antony Carr	G4-05	8122
<b>Deputy Director</b>	Keith Caldecott	G3-04	8120

The Director and Deputy Director will be responsible for implementation of any action necessary following an emergency incident. Examples include document - material recovery and organisation of additional communications and facilities during an extended evacuation.

<b>IT co-ordinator</b>	Bernie Broughton	G4-07	7518
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The IT co-ordinator will liaise with the University of Sussex IT services to ensure that all data is securely backed up and help establish any emergency operating systems required upon extended evacuation of the building.

<b>Unit Administrator</b>	Gee Wheatley	G4-04	8123
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Under direction from the Director or Deputy Director and other Key personnel of the GDSC, will be responsible for contacting Head of Estates. Holds all contact numbers and will liaise if temporary accommodation and systems are required in the event of an extended evacuation.

**Section 3-2: Key Contacts in University of Sussex**

Security Office: Should be informed of all major incidents ASAP 3333  
Rescue Team: Should be called to attend major injury or emergency 3333

University Safety Office. Hastings Building Director: Marion Richards 7347

The University Health and Safety Office is responsible for the co-ordination, review and implementation of local safety rules and regulations. They also hold formal responsibility for implementation of radiation safety and are available for advice.

Technical Services Manager, School of Life Sciences Teresa Knapp 8053

Should be consulted immediately after major event to provide advice and practical assistance.

Head of Estates and Facilities Management Group Martin Green/Andy Jupp  
8652/7077

Should be informed if major structural damage to property and for advice and assistance for relocation, enhanced security and issues relating to building structure.

Assistant Director Estates and Facilities Andy Jupp 8652

Should be contacted if the need arises to clear snow and ice for access, specifically in case of extended snow/ice preventing LN<sub>2</sub> delivery

## Section 4: Contingency Plan

The following core services are vital for the operation of the Centre, and need to be restored as soon as possible. Immediate action plans for restoring or substituting each are outlined

1. Water and Drainage (GDSC: Graham Frost. : Head of Estates)

University of Sussex Estates and Facilities Management are responsible for provision and will liaise with the appropriate company to ensure rapid and effective reinstatement of services. The Host institute is familiar with the urgency required.

2. Power (GDSC: Graham Frost. : Head of Estates)

The Building has an integral emergency generator, which is tested on an annual basis. This provides sufficient power to run all essential items. The University of Sussex Estates and Facilities Management group are responsible for mains provision and will liaise with the appropriate Company to ensure rapid and effective reinstatement of mains power. The University is familiar with the urgency required, and holds a number of portable backup generators, which will be available to us.

3. IT, links to JANET - Internet. (GDSC: Bernie Broughton/A. Herbert. :ITS Helpdesk)

The GDSC building uses the core services provided by the University IT Services. These services include secure file storage, email and workstations. Links to JANET and the Internet are maintained through the University Computer Services Division, who are responsible for University-wide provision. The University is familiar with the appropriate level of urgency required.

4. Building Security (GDSC: Graham Frost. : Head of Estates)

The Estates and Facilities Management Division of the Host Institute are responsible for campus-wide security and will provide additional security at very short notice in the event of an identified threat such as animal rights activists.

5. Glassware handling (washing machines, autoclave)

Laboratory equipment (centrifuges, etc.)

Most equipment is duplicated within the Centre to ensure adequate provision in the event of failure of a single item. i.e. two major preparative autoclaves are available. Five washing machines in 2 separate rooms are used for routine glassware preparation. Further facilities are available within the University. We have an informal arrangement where we reciprocally “share risks” and agree to help with a catastrophic failure.

6. RO water system (GDSC: Graham Frost)

A major concern is that a single integrated RO water system serves the whole building. Within this system some redundancy has been built in, but it remains vulnerable. While small quantities of purified water can be imported from the University in an emergency, this would not be sufficient if there were a catastrophic failure. We maintain a list of contact numbers of the suppliers and installers to ensure a rapid response. Cost considerations prevent a backup system being installed. This will remain under review.

**Contacts for RO system:**

Mitie Pharmaceutical Engineering Ltd, Mitie House, 10 Southampton Hill, Titchfield, Hareham, Hants, PO14 4AJ. Tel. No: 01329 849100

Installers: ELGA Process Water, Marlow International, Parkway, Marlow, Bucks SL71YL Tel: 01628 897000

Service Engineer Tel. No: 01628 897050(ELGA)

Consumables Tel. No: 01628 849100(ELGA)

Polished high quality water is provided by four independent units supplied from the integrated RO system, ensuring redundancy

**Contacts for polishers:**

ELGA: 01628 897050

Millipore: 01923 813388 (Service Dept), 08709 004645 (Switchboard)

7. Snow and Ice (GDSC: Graham Frost: Estates: Andy Jupp)

A major potential issue is the loss of access to LN<sub>2</sub> tanks due to snow and ice. Access through the car park to the fill point by gritting/clearing has been agreed with Estates on an “as need” basis:

Call **Andy Jupp**: Assistant Director: Facilities Management 8652 or 3289

UK: (01273) 678652 or (01273) 873289

## Section 5: Recovery plan

Core activities:

Maintenance of Tissue Culture Cell Bank

Maintenance of collections of other biological materials

Experimental procedures (various)

### Major incidents that may affect core facilities, recovery planning:

1. Loss of premises, or part thereof, due to contamination, fire or other damage.

In the immediate aftermath a salvage committee (Chaired by the Director, Chairman or laboratory manager and consisting of all Group leaders) will be formed. Advice on safety (such as entering the building) will be from the University Health and Safety Office (Marion Richards: 7347).

#### **Priorities:**

**1.** *Salvage and stabilise biological cultures (Cell stocks in liquid nitrogen, others in –80 freezers).* Alternative sources of LN<sub>2</sub> are available on campus:

(Locations: JMS, contact Steve Pearce x8872,

Physics, Mr Alex Burns, 01273 678067. Out of hours liquid nitrogen can be obtained by ourselves). Space in –80 freezers may be available within JMS and other campus locations. It is unlikely this will cover all relocations if all –80 freezers are inoperable. Solid CO<sub>2</sub> is available from Life Sci Stores, and can be used temporarily to keep cabinets sufficiently cold. More can be ordered, often within 24 hours (British Oxygen contacts, BOC 0800 111333). During this time, significant prioritisation for salvage may be necessary (Director and Deputy Director to co-ordinate, input from salvage committee would be necessary).

**2.** *Salvage all data possible.* All laboratory notebooks should be salvaged and placed in temporary storage if necessary. Salvage individual computers from offices, which may also contain important data (advice from salvage committee).

**3.** *Evaluate if building can be used in part and salvage equipment.* If so, move all appropriate salvageable equipment (computers, smaller laboratory equipment etc) to this area. If the Building is fully inoperable, move all salvageable equipment to site of safe storage. Such a site should be determined in consultation with the University (School of Life Sciences and Estates and Facilities Management Division).

**4.** *Salvage large equipment to appropriate site* (outside contractors to be employed).

**5.** In consultation with the University, establish temporary office accommodation with access to telephone and Internet for salvage committee, Laboratory supervisor and Administrative assistants.

**6.** Evaluate disaster and arrange temporary serviced accommodation.

## 2. Catastrophic loss of Liquid Nitrogen storage vessels

The system is alarmed to detect defects or low LN<sub>2</sub> levels in individual cell storage vessels (dewars). However, a catastrophic or cumulative failure is possible. As a prophylactic, many cell lines have been, and will continue to be, dispatched to the ECACC cell storage and distribution facility. However, many patient samples and primary lines cannot be duplicated. Should these be lost, much material is not retrievable.

Preventative measures include routine manual checks by staff. In the event of a failure being detected before the temperature rises, it is possible to retrieve the situation by adding LN<sub>2</sub> manually to dewars. We also hold an old "spare" dewar to allow a rapid establishment of a stable system.

The priority is ALWAYS to maintain the samples at -180°C. To this end, should our storage tanks be incapacitated, alternative supplies on campus can be manually transported to the storage Dewars. These can be replenished as LN<sub>2</sub> can be rapidly ordered from BOC in an emergency. Dewars will hold temperature for 2 days or more once filled, so this allows time to instigate necessary repairs (Service – SIS etc).

## 3. Sustained loss of RO grade water

Sustained loss of RO water to the building would incapacitate the glassware wash/prep. Limited glassware washing capacity may be available in the University, but this would not be sufficient for the whole GDSC. We would be reliant on outside contractors re-establishing the system.

## 4. Loss of the GammaCell Irradiator

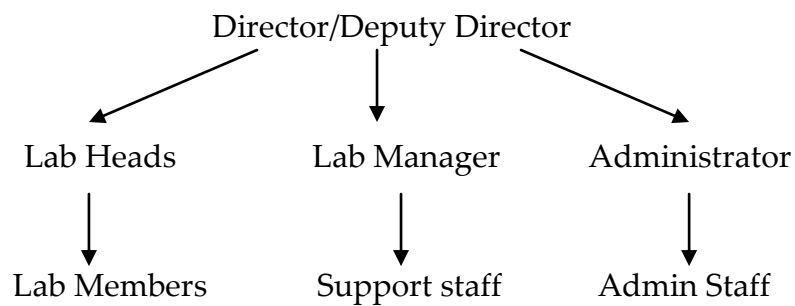
While the Irradiator is self contained, regularly serviced and not susceptible to leakage, there is always the possibility that it can be incapacitated by misuse in such a way as to be irreparable. This would pose significant limitations on our experimental ability. Due to expense > £100,000 and safety/environmental considerations, it is not appropriate to duplicate this equipment. Upon catastrophic failure, it would be necessary to urgently seek funds to replace this equipment from the usual commercial sources.



### Section 6: Cascade Communication

In order to contact all members of staff in the event of an emergency out of working hours, the following procedure will be followed:

1: The Director (A. Carr) and/or Deputy Director (K. Caldecott) will contact the individual lab heads, the Laboratory Manager (G. Frost) and Administrator (G. Wheatley). In turn, Lab heads will contact their respective lab members, the Lab manager will contact the support staff and the Administrator will contact the admin staff, maintenance engineer and porter.



A list of current staff and external contact telephone numbers is appended: