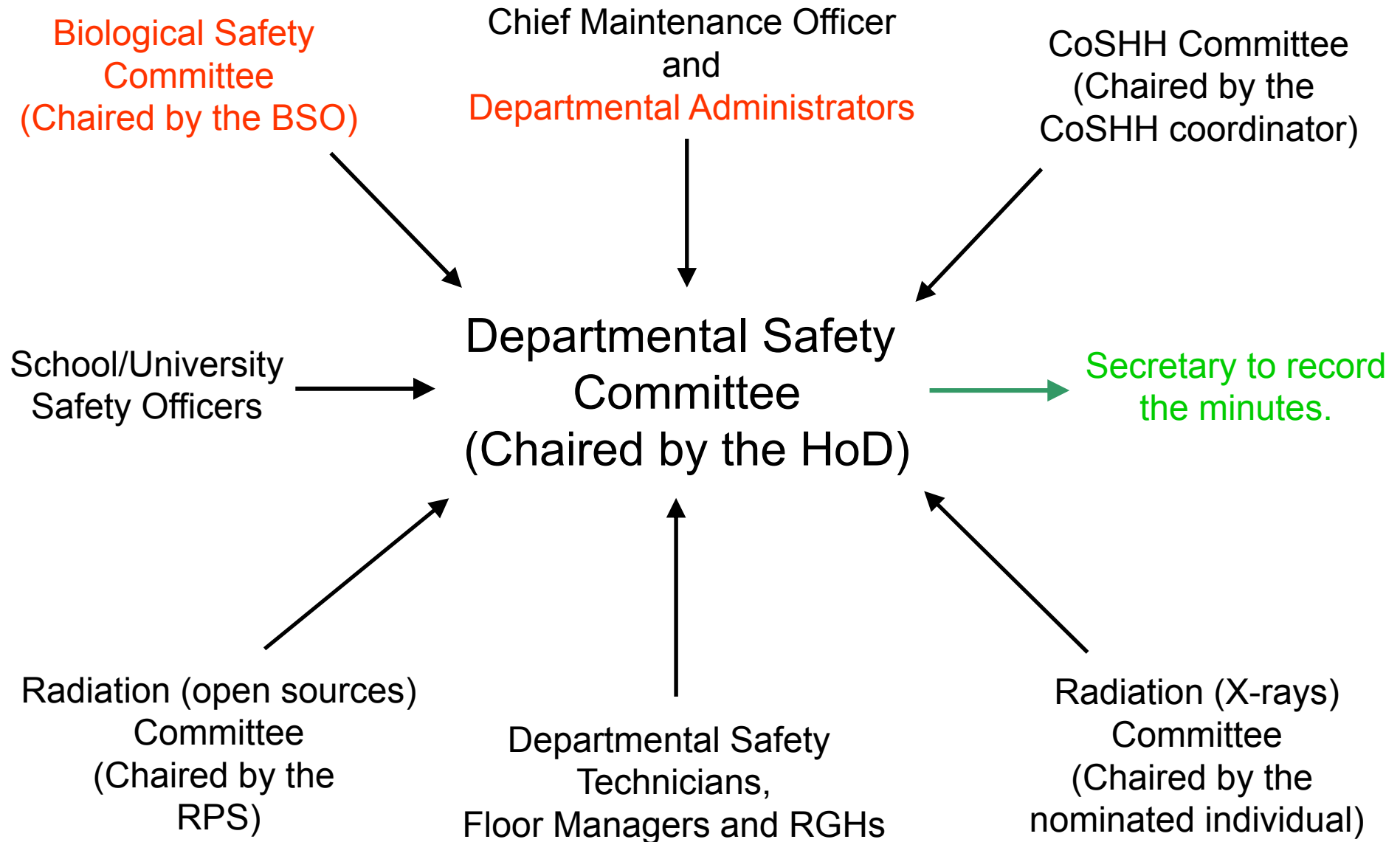


Biological Safety in the Department of Biochemistry



- ▶ Organizational Structure
- ▶ Systems in place for Record keeping and Monitoring
- ▶ Responsiveness to Audits and Changing circumstances

The Departmental Safety Committee meets once per term.





The Departmental Biological Safety Committee.

Our Remit includes oversight and approval of projects involving:

- ▶ Genetic Modification and the creation of Genetically-Modified Organisms (GMOs – both plants and animals).
- ▶ Genetically modified Microorganisms (GMMs).
- ▶ Work involving Human Tissue (covered by the HTA).
- ▶ Projects requiring Home Office approval.
- ▶ Projects requiring HSE or DEFRA licensing.
- ▶ Projects pertaining to SAPO (Specified Animal Pathogens Order).

All research groups are expected to have their work assessed on an ongoing basis.



The Departmental Biological Safety Committee.

Meets termly – dates arranged to be prior to the DSC.

(i) Structure and composition of the Committee.

Nominated BSO – Prof Paul Dupree (acts as Chair and Convener)

Two nominated Deputy BSOs;

Dr Trevor Littlewood – expertise in Biofacility Matters and Viral Vectors.

Dr Martin Welch – expertise in Molecular Microbiology.

Other academic members of the team are specifically selected for their expertise in relevant areas to match the Dept. Research Portfolio.

- ▶ Means that we are collectively competent to comment on Safety Assessments received.
- ▶ Also have representation from the **Departmental Administrators** (to provide the “bigger picture” e.g., what other cttees are doing, space issues etc).
- ▶ Also have representation from key **floor managers** and safety technicians.
- ▶ **School Biological Safety Officers** are invited to keep us informed of changes in legislation or University-wide policies.



The Departmental Biological Safety Committee.

(ii) Operation of the Committee.

- ▶ Safety Assessments are requested (by e-mailed circulation) to all RGHs ca. 3-4 weeks prior to each termly meeting.
- ▶ Work is NOT permitted to proceed unless it has been assessed. We encourage the individuals who will actually be doing the work to write the assessments.
 - All assessments are made using our agreed Departmental proforma.
- ▶ Assessments include Hazard identification, Risk Assessment and Risk minimization.
- ▶ *We routinely return assessments to RGHs for queries or correction.*
- ▶ We ask for ALL projects to be re-assessed every 3 years. This takes into account changes in staff, work aims, technologies used etc.
- ▶ To make life easier for our hard-pressed RGHs, if changes are only minor, we have a mechanism in place for simply listing these. More substantial changes require a new assessment to be made.



The Departmental Biological Safety Committee.

(ii) Operation of the Committee (continued...).

- ▶ Each assessment is circulated at the committee meeting. Most are routine (e.g., pertaining to straightforward cloning or protein over-expression etc), but all are assessed on a case-by-case basis. Importantly, *all assessments are read in detail by at least two people* – the BSO and a member of the cttee who has expertise in the relevant area.
- ▶ More time is usually spent discussing projects associated with e.g., organisms with higher hazard rating, or manipulation of potentially hazardous genes (oncogenes, allergens etc).
- ▶ In some cases, we arrange to visit the lab in question to assess safety measures directly.
- ▶ Other issues discussed (often as standing items):

Disposal.

Animal Matters.

Audits and visits.

New or incoming Safety Policies (School or National).

Facilities.



The Departmental Biological Safety Committee.

(iii) A committee with “teeth”.

- ▶ We make unannounced site visits to every lab in the Department to ensure compliance and assist in providing constructive feedback to improve things, if needs be.
- ▶ The names and affiliations of non-compliant individuals or labs, especially repeat offenders are recorded and dealt with, usually diplomatically.
- ▶ We are empowered to enforce additional training for individuals.
- ▶ We have the power to stop work and have done so.



The Departmental Biological Safety Committee.

(iv) Record Keeping and Audits

- ▶ We keep meticulous records of all internal meetings and site visits.
- ▶ We keep records of all relevant Biological Stocks (a requirement for many licenses or approvals e.g., HSE, DEFRA, HTA etc).
 - What stocks do we have?
 - Where are they?
 - How much of it is there?
 - If necessary, how is it disposed of (disposal records).
- ▶ We keep records of courses/training attended.
- ▶ For external audits, a thorough documented paper trail is as important as the “wet” biology end of things.....

The Departmental Biological Safety Committee.

(iv) An inspector calls.....

- ▶ What do they want to see?
We ask them.

We get the documentation prepared and present it in an organized way.

- ▶ We do site visits to ensure compliance is 100% before the visit.
- ▶ We ensure that relevant staff are fully-informed about the visit and are prepared (and competent) to answer questions.
- ▶ We liaise with other Departments (if necessary).
- ▶ We respond to feedback and change our procedures accordingly.

