Minutes of the 10th meeting of the Biosafety Committee of the University of Hong Kong. (A sub-committee of the Safety Health and Environment Committee).

Held on Thursday, 14th March 2013, 10.00 a.m., Room 412 at Professorial Block, Queen Mary Hospital

The following members were present:-

	Affiliation	Function/Role
Professor K.S-L.Lam	Medicine	Chairman
Dr E.K.M. Hau	Safety Office	Safety Office Rep
Dr. K.S. Lo	LAU	CULATR liaison etc.
Dr VCH Lui	Surgery	Medical Faculty Rep
Dr. Mike Mackett	Safety Office	Secretary (BSO)
Dr C.F. Zhang	Dentistry	Dental Faculty Rep
Dr Hani El-Nezami	School of Biological Sciences	Science Faculty Rep
Professor F. K.S. Leung	Education	Independent advisor

Apologies were received from Professor G.S.W. Tsao.

1. Minutes of the 9th meeting of the Biosafety Committee (Oct 11th 2012)

The draft minutes of the 8th meeting of the Biosafety Committee were confirmed as an accurate record of the meeting.

Action point: Secretary to arrange for the final version of the minutes to be posted on the Safety Office website

2. Matters arising from the minutes of the 9th meeting (action points etc.)

(A). Administration

The secretary arranged for the final version of the minutes of the February 9th 2012 meeting and updated guidance on clinical waste to be posted on the Safety Office website. (B-E). These matters arising were discussed under the relevant items on the agenda.

At this point the secretary was asked about the new introductory course to biosafety. He explained that two courses had taken place in September and October 2012 and the next was likely to be in October 2013. Some discussion ensued about whether it was possible to make this course compulsory for new members of staff and students. Several suggestions were made about how this might be done in the context of current RPG arrangements and also ensure that RA's handling biological materials were included. It was pointed out that since 2012 all new staff have been required to attend a formal session on research integrity and it appears this is now also a requirement for all staff including senior professors who have been in the University for a long time.

The point was also made that many new staff members, RPGs and RA's arrive in the University at non-standard times and with just two courses a year it may not be possible to insist on this requirement. However, the opinion of the meeting was that it would be

valuable for much of the course content to be available on line possibly as a Moodle course and that this would allow flexible self-study for students and staff who could not make the courses. This would also allay some of the concerns that RPG students were being required to take many courses which was cutting down on the time they could spend in the laboratory on practical work. It was also noted that the Safety Office had already produced a training course for departmental safety representatives that was available online.

The secretary indicated that he would prefer to keep the face to face sessions partly because this was an opportunity for staff to see who he was but also as the process of advertising the sessions would remind all involved of the requirement for staff and students to do the course.

Action point: Secretary to investigate how an introductory Biosafety course might be delivered, develop the content further and report back to the next meeting on the progress made.

3. Monitoring Biosafety

The secretary undertook to review (by reading in detail) 100 of the Faculty of Science and Medicine proposals selected at random in blocks of 10 (in numerical order). This took 10-15 minutes per proposal and while very interesting it was a significant undertaking and clearly not exhaustive in terms of looking at all proposals. Consequently he felt that it was not possible to scrutinize all proposals in detail. He noted that while it is understandable that the UGC requires some sort of reassurance that the proposals are safe the process does seem to make more work that is necessary for all parties (including the CULATR and human ethics committee) because many proposals are unsuccessful.

There was a significant amount of discussion around this issue. The committee wondered if it was possible to develop a two stage procedure with an initial declaration that the work described would be carried out safely and a closer scrutiny applied when a grant was awarded. Thus it might be possible to defer CULATR or Human Ethics approval until the second stage.

A number of conclusions from the discussions are summarized below and were generally agreed by the meeting.

- 1. The Biological Safety form needs some revision.
- 2. Considering the manpower available it would not be possible to scan all UGC grant proposal submissions for Biosafety concerns. Partly because the scanned format means that keyword searches could not be performed on the applications but partly because of the sheer numbers of applications.
- 3. Based on the assumption that around 100 proposals involving biological materials would be successful the secretary thought a detailed review of the successful proposals was possible.
- 4. Part of the discussion involved CULATR proposals which contain a safety approval section which is reviewed by the Safety Office. The suggestion was made that the

CULATR safety approval could be given at the departmental level which would speed up the process.

4. Risk assessment.

The secretary explained that the risk assessment guidance document arose out of a recommendation from a sub-committee meeting convened to discuss risk assessment. A risk assessment document with worked examples would provide a resource that might be used as a standard. The tabled document was modified slightly from the one originally presented to the last Biosafety committee meeting and includes an example taken from the cell line guidance as a further illustration along with a different bacterial pathogen. The secretary also indicated that the first part of the document describes the internationally accepted practice of assigning infectious agents to 4 hazard groups (sometimes called risk groups) and the difference between different levels of containment.

The meeting noted that document was rather long but that as the nature of some assessments requires detail it was not considered as too much of a disadvantage. To make the document more accessible a one page index and many highlighted boxes were used to emphasize the important points. It was also pointed out that in one particular example (risk assessment for adenovirus vectors) two different assessment formats were employed in order to illustrate that assessments can be flexible in their approach and underline the fact that no one way has been adopted internationally as a standard.

The thinking behind the first few examples is to make the methodology clear with simple examples where the risks are widely appreciated.

Following a limited discussion the committee agreed that the document is at a stage where it can be sent to interested parties for consultation following which it would be sent to SHEC for information and final approval.

Action point: Secretary to:-

- i) Circulate the guidance via e-mail to interested parties for consultation (along with the revised biosafety policy document).
- ii) Modify when responses received and re-circulate by e-mail to the Biosafety Committee.
- iii) Send to SHEC for information and approval

5. A review of the University Biosafety Policy

The secretary indicated that an updated Biosafety Policy document was included in the meeting papers. He pointed out that some sections e.g. the one on Hong Kong legislation had been rewritten because of new information, some information has been moved to other sources with the intention of making the policy document less cluttered and more accessible. The secretary indicated that the intended function of Section 13 called "frequently asked questions" was also to improve clarity and accessibility.

There was some discussion on the document and its contents, a number of issues being highlighted, including some minor omissions and typographical errors. The question of was

raised of whether recent guidance to HoD's on keeping a inventory/list of Class 2 organisms was included in the document. Although we couldn't find it at the time it is present in Section 3.6 possibly rather understated and this will be clarified before the document is sent out for consultation.

How could awareness of the policy and its provisions be improved within the University? It was agreed that we should we carry out a consultation with interested parties as was done for the original policy and seek approval from SHEC following potential modification after comments are received.

Action point: Secretary to:-

- i) Circulate the policy via e-mail to interested parties for consultation (along with the risk assessment document).
- ii) Modify when responses received and re-circulate by e-mail to the Biosafety Committee.
- iii) Send to SHEC for information and approval

6. Guidance on the use of cell lines in research

The secretary indicated that the document "Guidance on the use of cell lines in research" was modified from that considered at the last meeting and includes extra paragraphs on xenotransplantation experiments, stem cells, iPSC's and cells modified by lentiviruses. The secretary also highlighted the section in the document on adventitious infection emphasizing that staff and PI's need to be more aware of this potential hazard particularly where human tumours are passaged in immunodeficient mice. The committee formally approved the guidance document.

Action point: Secretary to arrange for this guidance to be placed on the Safety Office website.

7. Selected recent incidents and laboratory acquired infections - for information.

The secretary explained that this item was for information and need not be discussed unless members wished to. The document was presented as a reminder to the committee that laboratory acquired infections (LAI) do occur in many countries, even those with rigorous and highly developed systems. He highlighted one set of LAI's with *Salmonella typhimurium* which were of particular note and involved an estimated 109 infections in 38 different states of the USA over a period of 10 months in 2011 - Health officials believe students or lab employees may have carried the bacteria to their homes on contaminated lab coats, pens, notebooks, or other items.

8. Any other business.

Dr KS Lo informed the committee that the next visit of the AAALAC (Association for Assessment and Accreditation of Laboratory Animal Care) accreditation panel will take place at the end of the year. He indicated that the panel was always keen to meet users and if any of the committee would like to meet them it can be arranged. The Secretary and Head of Safety will probably meet them and can report back to the committee if issues arise.

9. Dates of next meetings.The next Biosafety Committee meeting was due to have been held on the 10th October 2013. Professor Leung noted that he was not able to attend then. The secretary agreed to circulate the committee with alternative dates and times early in October.