

Annex 1

Some scenarios suggested for the Virtual Laboratory

1. **Equipment layout in virtual microbiology laboratory** - Lab Tour
 - a. 3D imagery of laboratory identifying equipment, areas used to make up media etc. category 4 separate room , ?click on equipment to identify it , Flow cytometer (separate room?) etc

2. **Health and Safety issues** – protecting the person and protecting the work place
Procedures – link with wrong practices in virtual lab (1 above) and consequences

3. **Practical requirements for bacteriology** –
 - Media preparation for growing and identifying bacteria
 - Setting up microscope for looking at samples
 - (These could be linked to podcasts with video) – some already prepared at UOW but would need translation

4. **Practical requirements for virology** – ? mycology and parasitology?
 - Growing viruses in tissue culture
 - Virtual Electron Microscope
 - Immunofluorescence techniques for identification

5. **Sample taking and their examination** - Urinary tract infections
 - visual and micro levels, examine under microscope etc.
 - Gram stains
 - Streaking

6. Bacterial growth and identification
 - Use of different growth media, Colony counting - Biochemical tests etc
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7. Antibiotic sensitivity

8. Case studies: TB–growth, tests for strains, -PCR etc (separate molecular Biology Lab)

9. Case studies: HIV – handling, ELISA, Flow, etc

We could do sample taking and identification of viruses as a separate task (ie(8) or condense 6 and 7 if number of tasks too many.