

[Pick the date]

Critical Work Function: Maintain a safe and productive work environment

Key Activity: Maintain a safe, clean, contamination-free, and clutter-free work environment

Assessment:

Visual inspection of a student's lab bench and workspace should confirm the following:

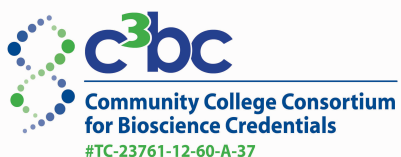
- There are no spills
- All paper waste has been disposed of
- All plastic waste has been disposed of (e.g. microfuge tubes)
- Glassware has been removed to the washing area
- Reagents and supplies are returned to common location in a timely manner after use

A student's ability to maintain a contamination-free environment can be indirectly assessed by:

- Observing a lack of contamination in bacterial and/or mammalian cell cultures
- Observing a lack of amplicons from common bacterial contaminants in PCR reactions
- Asking students to swab various work surfaces with a sterile cotton swab that is then streaked on undefined solid media. An excess of colony forming units (cfus) would indicate that the student needs to improve his or her ability to maintain a sterile environment.

Resources for teaching:

- Seidman, L.A., M.E. Kraus, D.L. Brandner, J. Mowery. 2011. Laboratory Manual for Biotechnology and Laboratory Science Pearson Education, Inc., San Francisco, CA.



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