

SOP: GBT.003  
Revision: 1.0  
Title: Gloving Procedures

### 1.0 Purpose

To provide instructions for the correct method of putting gloves on and taking them aseptically, especially when working in the areas of cell culture and nucleic acid techniques.

### 2.0 Scope

This procedure applies to all students, lab assistants and instructors working in the Biotechnology laboratory. Gloves are to be worn during all laboratory procedures.

### 3.0 Responsibility

All students and instructors in the Biotechnology laboratory must wear gloves while working in the laboratory. Instructors will demonstrate the proper method for gloving and de-gloving on the first day of each class.

### 4.0 Procedure

#### 4.1 Materials

4.1.1 Laboratory Gloves (e.g. Microflex Evolution 1)

#### 4.2 Procedure

*Primary goal of this procedure : do not touch the outside surface of the glove with bare hands*

4.2.1 Wash and thoroughly dry hands (SOP GBT-002).

*Note: Wet hands are extremely difficult to glove*

4.2.2 Grasp a glove protruding from the box on the inside cuff with the index finger on your right hand and remove from the box without touching the outside of the glove with your bare hand.

4.2.3 Insert the rest of your fingers of your right hand inside the glove (without touching the outside of the glove) and spread your fingers out so as to spread out the glove. You may use your left hand *inside* the glove for assistance.

- 4.2.4 Place your left palm so that it is aligned with and facing the same direction as your right palm - the right palm will be facing the back of the left hand. In this position the thumb on the right hand is facing up and the thumb on the left hand is facing down. Now place the first two fingers of the left hand *inside* the cuff (not touching outside) and pull the glove over the right hand.
- 4.2.5 Using the gloved right hand obtain a second glove from the box handling the *outside* surface of the glove.
- 4.2.6 Place the fingers of your left hand inside the glove and spread them apart so as to open up the glove.
- 4.2.7 Grasp the *outside* cuff of the glove on the palm side of the left hand with the gloved right hand and pull the left hand glove on. The cuff should be slightly folded over to allow a grip.
- 4.2.8 To remove and dispose of gloves pull the glove off starting at the *outside* cuff, up and over hand so that glove is inside out.
- 4.2.9 Place the first glove removed in the palm of the other glove. Place the fingers of the ungloved hand on the *inside* of the cuff of the gloved hand (which is holding the first glove removed) and pull the second glove over the glove held in the palm so this it is now inside out with first glove retained inside the second glove.
- 4.2.10 Dispose of the gloves in the proper waste container (e.g. Biohazard waste).

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General SOPs and Exercises  
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Biotechnology Program  
Montgomery College  
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Glove Traceability:

Glove: \_\_\_\_\_

Vendor: \_\_\_\_\_

Catalog #: \_\_\_\_\_

Lot #: \_\_\_\_\_

Exp. date: \_\_\_\_\_

## Instructor Notes:

- T discuss concept of glove compatibility with chemicals (covered in BT 101)
- T possible allergic reaction to latex gloves
- T Gloves are to be worn at all time while doing lab work.
- T Distinguish between cell culture gloves (longer cuffs) and normal gloves
- T check gloves frequently for rips / holes
  - frequency of checking depends on activities -
  - E.g. loosening caps or other stressors check after each activity
- T change gloves frequently for aseptic work and/or if lots of exposure of glove to solvents
  - e.g. alcohols: isopropyl methanol ethanol
  - Chloroform or methylene chloride
  - Acetone
  - Organic acids or bases acetic, propionic, formic
  - Ammonia, triethylamine or triethylamine
  - Formamide

These types of chemicals will likely compromise the integrity of the glove
- T double glove for extremely hazardous / pathogenic materials
- T be careful of surfaces you touch with gloves on gloves can spread contamination

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no scratching face etc  
Buttons on instruments, cabinet handles, door knobs,...

**T** gloves are disposed of in the Biohazard waste container

Announce to class and enforce :

2 points off for *each student in the class* if gloves are placed in the  
“normal trash” or broken glass box - regardless of which student actually  
put the gloves in the box -this is to teach students proper waste disposal  
and to be responsible for one another - to work as a team

< ***Please ask students to be conservative with glove use in Biotech  
labs - they are expensive and our budget is not same as industry or  
NIH***