

**BURRELL COLLEGE  
OF OSTEOPATHIC MEDICINE  
POLICY MANUAL**

SECTION: Research

BCOM Policy 7101

TOPIC: Biosafety

Approval Date: 08/22/18

Revised:

Approved: Signature on File  
Dean

Page 1 of 2

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## **PURPOSE**

Biological safety addresses the safe handling and containment of biohazardous materials in order to protect humans, animals, plants and the environment. The Biosafety policy describes the College's stance on the regulation, handling, containment and disposal of biohazardous material.

The National Institutes of Health (NIH) requires that the College possess an Institutional Biosafety Committee (IBC) for research involving recombinant and synthetic nucleic acid molecules. The Burrell College of Osteopathic Medicine (BCOM) IBC reviews, approves and oversees activities in accordance with the responsibilities defined in Section IV-B-2 of the NIH Guidelines for Research Involving Recombinant or Synthetic Nucleic Acid Molecules. BCOM has expanded the scope of the IBC to include oversight, administration and review of College policies and research involving any microorganism, biologic toxin, or other biologic material that may pose a threat to humans, animals, plants or the environment. The IBC is charged with providing institutional assurance to the Assistant Dean for Research that research is conducted in accordance with current local, state and federal regulations relating to the use and disposal of biohazardous material. To this end, the IBC assists and advises researchers in meeting their responsibilities to ensure that all biological aspects of research are conducted in a safe manner using established biosafety standards, principles and practices.

The IBC is empowered to withhold authorization of any studies that do not adhere to Centers for Disease Control and Prevention (CDC) and NIH Guidelines until containment requirements are established.

## **SCOPE**

All BCOM faculty, staff, students, visitors and contractors engaged in work involving biohazardous materials.

## **RESPONSIBLE OFFICIAL(S):**

Assistant Dean for Research

Chair, Institutional Biosafety Committee

## **DEFINITIONS**

**Biohazardous materials:** Any material of biologic origin that is potentially hazardous to humans, animals, plants and the environment including but not limited to:

- Known pathogenic agents: bacteria, viruses, fungi, parasites and prions.
- Nucleic acids used in genetic manipulations (recombinant DNA technology, synthetic biology).
- Cell lines: human or non-human primate derived; lines deliberately infected with a pathogen or exposed to a biologic toxin; any recombinant cell line.
- Animals including research and wild animals that are known or suspected to harbor pathogenic organisms.
- Toxins of biologic origin.
- Plant materials including those that are known or suspected to harbor plant pathogens or plant pests; transgenic plants; and exotic plants.

- Animal materials including transgenic animals; blood, blood components, body fluids, tissues or organs from animals known or suspected to harbor pathogenic organisms.
- Human materials including human blood, blood components, body fluids, tissues or organs.
- Vectors including arthropods that are known or suspected to harbor pathogenic organisms.
- Select agents are agents that have been determined by the federal government as being capable, if released, of causing a serious public health crisis or are high consequence agricultural pathogens. The select agent lists can be found in 42 CFR Part 73 (human and overlap), 7 CFR Part 331 (plant), and 9 CFR Part 121 (animal).

Containment refers to the safe work practices, equipment and facility design used to protect personnel, the environment and the community from exposure to biohazardous materials.

The Centers for Disease Control and Prevention's publication Biosafety in Microbiological and Biomedical Laboratories (BMBL, 5<sup>th</sup> Edition) defines four biosafety levels (BSL-1, -2, -3, and -4) that describe increasing levels of containment.

## **POLICY**

The Burrell College of Osteopathic Medicine will follow all current federal, state and local regulations/guidelines for the handling and containment of biohazardous material. The BCOM IBC is the entity responsible for enforcing these regulations. This policy applies to all faculty, students, staff, visitors and contractors at The Burrell College of Osteopathic Medicine.