

**Attachment B.  
Microbial/Infectious Agents**

Check all that apply:

Risk group (RG) of pathogens/infectious agents:

- RG1/BSL-1      RG2/BSL-2
- We will be introducing microbial/infectious agents *in vivo*
    - We will be introducing microbial/infectious agents into animals (vertebrates or invertebrates) or plants (complete [Attachment G](#))
    - We will be introducing microbial/infectious agents into other microbes
    - We will be introducing microbial/infectious agents into cell cultures, organs, or unfixed tissues (complete [Attachment C](#))
    - We will be transferring microbial/infectious agents into one or more human research participants (contact the IBC at [biosafety@sjsu.edu](mailto:biosafety@sjsu.edu))
  - We will be collecting environmental samples with the purpose of RG2/BSL-2 microbial agents (complete [Attachment D](#))
  - Procedures will be performed with microbial agents that may be associated with an increased potential risk of exposure to personnel. Explain below.
  - We will be handling or culturing 10 liters or more at any one time (contact the IBC at [biosafety@sjsu.edu](mailto:biosafety@sjsu.edu))
  - We will be working with [Select Agents](#).

A Standard Operating Procedure (SOP) must be attached that describes your methods for producing and using microbial/infectious agents. A detailed step-by-step protocol is not necessary, but provide sufficient information on your procedures so that the committee can identify the steps that involve the greatest likelihood of worker or environmental exposure to biohazardous materials. Include the steps that will be conducted in a biological safety cabinet (including reagent and construct preparation). Consult the SOP template and the sample BSL-2 SOP for other required components.

## Microbial/Infectious Agents

Include bacteria, virus, yeast, fungi, prions, rickettsias, and parasites in Risk Group 2/BSL-2.

Microbe Source (genus, species, strain)	Risk Group (BSL)	Replication competent (Y/N)	Host Range of agent (specify species – humans, animals (vertebrates), plants)	Route of Transmission	Disease or Toxins produced	Notable hazards (e.g., to sensitive individuals or environmental release)
Candida albicans	2	Y	Humans	Ingestion and contact with mucosal membrane	Candidiasis and candidemia	Susceptible to azole, polyene, and echinocandin classes of drugs
Candida glabrata	2	Y	Humans	Ingestion and contact with mucosal membrane	Candidiasis and candidemia	Susceptible to azole, polyene, and echinocandin classes of drugs

## Risk assessment.

If you are using a plant or animal (vertebrate) pathogen, discuss the possible consequences of a release into local agricultural areas or natural ecosystems and how you will minimize that risk.

C. albicans and C. glabrata are commensals in mammals including humans. If strains with reduced susceptibility to antifungals are released to the environment, there is risk of rendering those drugs ineffective in treating disease. Risk of release will be minimized by ensuring that all work with live agents are performed in certified biosafety cabinets, and live cultures are either treated with 10% (final volume) bleach for at least 30 minutes before releasing down the drain or disposed as biohazard waste.

<input checked="" type="checkbox"/> N/A	<h3>Regulated Select Agents</h3> <p>See <a href="#">link for list of Select Agents</a> and <a href="#">exclusions</a>. If agent is not eligible for exemption or exclusions, list the agents below and submit a copy of the Select Agent registration application to the IBC</p>
Name of Microbial Agent and Strain	