READ AND REVIEW ANY APPLICABLE MANUFACTURER/VENDOR MATERIAL SAFETY DATA SHEET (MSDS) INFORMATION BEFORE DEVELOPING STANDARD OPERATING PROCEDURE AND PERFORMING WORK.

PI Name: _Michael McClelland_____

Dept/Section Name of Work Unit:_____Microbiology and Molecular Genetics_____

Standard Operating Procedures for _Working with *Salmonella* and wild type *E. coli*_____

#1	Scope of Work/Activity: State the process/operation/equipment that the SOP concerns. The growth of *Salmonella/E. coli* and preparation of extracts from *Salmonella/E. coli* using biosafety cabinets, incubators, centrifuges, pipettes.
#2	Specific Safety and Environmental Hazards: State the specific hazard and consequences if procedure not followed to person, environment, or property. Review MSDS prior to working with any hazardous material. Links to https://ehs.ucop.edu/sds/. Incorrect handling of hazardous chemicals can hurt you or your co-workers. Go to http://ucirvine.ecompliance.net/index.jsp to register with CiBR-Trac, and inventory of chemicals. If the chemical is not listed, then add it. *Salmonella/E. coli* is potentially infectious to humans. Most exposed individuals do not become sick, and most that do become sick have a mild gastrointestinal infection. However, it is possible to get a more severe infection. Many of the strains we use have mutations that make them less infectious or are rarely, if ever, associated with disease. Nevertheless, these strains might be dangerous to some individuals and should be treated with the same care as known pathogens. *Salmonella/E. coli* might persist on a surface if not killed. *Salmonella/E. coli* might be transmissible through the air if an aerosol is generated during manipulation.
#3	Engineering Controls: Describe any specific engineering controls which are required to prevent employee injury to hazards such engineered sharps, biosafety cabinet, fume hood, etc. The biosafety cabinet in room 132 and is for routine use. Open containers of *Salmonella/E. coli* must be manipulated in a biosafety cabinet. Containers containing live *Salmonella/E. coli* should be enclosed when they are not in a Biosafety cabinet. If you are going to use metal or glass sharps, review with your supervisor whether a safer method can be devised. When engaged in an activity such as vortexing that may cause an aerosol the container must be closed.
#4	Designated Area: Indicate the designated area for performing this process in the laboratory and required signage in Room _132__

#5	Personal Protective Equipment (PPE): State the personal protective equipment selected and required. Wearing protective eyewear is important whenever in a lab. It protects against chemicals, some biological risks, and malfunctioning equipment. Personnel handling *Salmonella/E. coli*, cell lines, tissues, or chemicals must use disposable gloves and a lab coat. Open containers and materials known to contain or possibly containing *Salmonella/E. coli* must be manipulated in a BioSafety Cabinet. You have the option to be fitted for an N96 respirator each year by EH&S. If you do not wish to avail yourself of this option, you will have to sign a declination. Even if you decline, there will be disposable N95 respirators available and it is recommended that you use one.
#6	Important Steps to Follow: List the specific sequence staff should follow to avoid hazard. Complete all required lab safety courses online at http://www.uclc.uci.edu/. You cannot work until you do so. Read the Exposure Control Plan that is posted on the lab web site. Do not use sharps unless necessary, and with caution. Dispose of all contaminated materials properly in biohazardous waste. Wipe down all surfaces with 10% bleach before use, and directly after use. This will protect you and other users from unsuspected contamination.
#7	Emergency Procedures: Wash any exposed area on your body thoroughly or follow the instructions you read in the MSDS, above. Consult University Health or another Physician. -Inform Michael McClelland so that we can complete an online incident report form at www.ehs.uci.edu Label the area as having been contaminated or have someone else label the area. Use a decontamination procedure compatible with the MSDS. If the contamination is with *Salmonella/E. coli* then have someone else promptly decontaminate the area with 10% bleach or do so yourself if no-one else is available.
#8	Identify waste stream and disposition of waste, and unused stock of chemicals Identify if waste is biohazardous, pathological waste, or hazardous waste, etc. Additional guidelines regarding hazardous waste and pathological waste can be found at: http://www.ehs.uci.edu/programs/enviro/ • Surplus chemicals will be disposed of as hazardous chemical waste. • Obtain waste containers from EH&S. • Sharps will be disposed of in “Sharps” container. • Utilize the on-line system for requests by requesting a “Chemical Waste” Pickup via the Internet: https://ehs.uci.edu/enviro/haz-waste/text-to-pickup.php •
#9	Decontamination and spill clean-up procedures Expose the area to 10% bleach for at least 10 minutes. Label the area as having been contaminated so others that enter the area will be aware. Inform your supervisor on any spills.

As the Principal Investigator, it is your responsibility to ensure that all individuals listed in this protocol is taught correct procedures for the safe handling of hazardous materials involved in this study. It is also your responsibility to assure that your personnel attend Lab Core Safety Training and other applicable safety training courses.

Both PI and all persons associated with the protocol must sign the following acknowledgement:
I have read, asked questions, and understand the hazards of and safe working procedures for the activity/materials described herein.

ELECTRONIC SIGNATURES ARE ACCEPTABLE AS LONG AS ACCOMPANIED BY AN EMAIL FROM YOU CONFIRMING THE SIGNATURE

MMcClelland 12/13/2021

PI Signature: DATE

Other Personnel:

WChu 12/13/2021

Name/ Signature DATE

SPorwollik 12/13/2021

Name/Signature DATE

Truong Chi Toan Ngo ngotc1@uci.edu 12/13/2021

Name/Signature DATE

Jocelin Martinez jocelim5@uci.edu 12/13/2021

Name/Signature DATE