

# FOOD SAFETY LAB / MILK QUALITY IMPROVEMENT PROGRAM



Standard Operating Procedure

Title: Laboratory Cleanliness and Safety Audit

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## Laboratory Cleanliness and Safety Audit

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### TABLE OF CONTENTS

| 1. | Purpose Scope Definitions Safety | 3 |
|----|----------------------------------|---|
| 2. | MATERIALS                        | 4 |
| 3. | PROCEDURE                        | 5 |
| 4. | TROUBLESHOOTING                  | 6 |
| 5. | REFERENCES                       | 6 |
| 6. | METHOD REVIEWS & CHANGES         | 6 |
| 7. | APPENDIX A                       | 7 |



#### LABORATORY AUDIT FSL/MQIP @ CORNELL UNIVERSITY

Effective 11/6/2023 Version 02 Revised 11/6/2023

## **SECTION 1 INTRODUCTION**

### 1.1 Purpose

The purpose of this document is to set forth standard guidelines for performing a laboratory audit.

### 1.2 Scope

This SOP applies to the Food Safety Lab, including the Laboratory for Food Microbiology and Pathogenesis of Foodborne Diseases and the Milk Quality Improvement Program.

#### 1.3 Definitions

#### 1.4 Safety



#### LABORATORY AUDIT FSL/MQIP @ CORNELL UNIVERSITY

Effective 11/6/2023 Version 02 Revised 11/6/2023

#### **SECTION 2** MATERIALS

- Laboratory Audit Checklist: This is located in Appendix A of this document.
- Previous Laboratory Audit Checklist report \\cornell.edu\ag\FOOD\FOOD-Labs\BoorWiedmannLab\LAB STUFF\Clean Team Audit Reports
- Computer
- Laboratory Responsibilities List
   (https://cornellprod.sharepoint.com/:x:/r/sites/CornellFSL-MQIP/Shared%20Documents/General/LabResponsibilities.xlsx?d=w6f644dad5e8d4f0c8df288cdb6d8ca10&csf=1&web=1&e=sElw7F)





#### FSL/MOIP @ CORNELL UNIVERSITY Revised 11/6/2023

Effective 11/6/2023

#### Version 02

#### **SECTION 3 PROCEDURES**

#### 3.1. Laboratory Audit Schedule

- 1. The laboratory audit schedule will be emailed to the lab by the person who is assigned this duty on the Lab Responsibility Sheet
- 2. Lab members in groups of 3-5 will be assigned weeks to perform the lab audit on a rotating basis

#### 3.2. Preparation for laboratory walk-through audit

- 1. Print the previous Clean Team Audit report from the network drive: \\cornell.edu\ag\\FOOD\\FOOD-Labs\\Boor\WiedmannLab\\LAB\\STUFF\\Clean\Team\\Audit Reports
- 2. Print the previous Clean Team Audit email.
- 3. Print the walk-through checklist in Appendix A.

#### 3.3. Laboratory Audit Procedures

- 1. Review the email and report of the previous Clean Team Audit. You must ensure that all issues in the previous report have been resolved/addressed.
- 2. Minor issues that can be quickly resolved (e.g., dried petri plates in the incubators, razor blade on the bench, etc.,) must be corrected immediately by the audit team. <u>Include</u> the issue in the report and mention that it was resolved.
- 3. Perform the lab walk-through inspection using the checklist in Appendix A. Pay attention to the following issues:
  - a. Food items in the lab are clearly labeled "for research only, not for consumption".
  - b. Containers are clearly [and correctly] labeled (i.e., contents, the date, initials, or netID).
  - c. Flammable-containing solutions are placed on the main bench (not on the selves) and are clearly labeled.
  - d. BSL bins are not overflowing with waste. Bags must be removed when they are two-thirds filled.
  - e. Sharps are correctly stored (i.e., 'razor blades' need to be stored in a petri dish; they should not be lying on the bench top).
  - f. Lab drawers/cabinets and incubators must be opened during the inspection. Make sure that everything is labeled correctly.
  - g. No syringes or needles should be stored in drawers. Syringes or needles should always be under lock and key.

## MQIP MILK QUALITY IMPROVEMENT PROGRAM

#### LABORATORY AUDIT FSL/MOIP @ CORNELL UNIVERSITY

Effective 11/6/2023 Version 02 Revised 11/6/2023

- h. Waste flasks in the tissue culture hood and chemical hoods are clearly labeled (waste contents, the date, and initials).
- i. Containers of chemical wastes in the chemical hoods are placed in a secondary container and labeled correctly.

#### 3.4. Steps after the laboratory walk-through audit

- 1. Fill in the Clean Team Audit report and save a copy at \\cornell.edu\ag\FOOD\FOOD-Labs\BoorWiedmannLab\LAB STUFF\Clean Team Audit Reports
- 2. Email the Clean Team Audit report and the related comments/pictures to the FSL Suite group FOODSAFETYSUITE-L@list.cornell.edu
- 3. For specific issues (e.g., water bath cleaning, freezer defrosting, etc.,) email the responsible persons (both the primary and secondary) according to the responsibilities list at <a href="LabResponsibilities.xlsx"><u>LabResponsibilities.xlsx</u></a> and cc the person responsible for general lab inspection (currently Ahmed at <a href="ag67@cornell.edu">ag67@cornell.edu</a>). One person from the team that finds the issue needs to make sure the issue is resolved.
- 4. For issues in the previous audit report that were not resolved, email the previous audit team and cc the person responsible for general lab inspection (currently Ahmed at ag67@cornell.edu).



# LABORATORY AUDIT FSL/MQIP @ CORNELL UNIVERSITY

Effective 11/6/2023 Version 02 Revised 11/6/2023

SECTION 4 TROUBLESHOOTING

SECTION 5 REFERENCES

SECTION 6 METHOD VERSION & AND CHANGES

| VERSION   | DATE       | <b>EDITOR</b> | COMMENTS       |
|-----------|------------|---------------|----------------|
| Version 1 | 5/19/2020  | Rachel E.     | Original SOP   |
| Version 2 | 11/06/2023 | Ahmed         | Overall update |
|           |            | G.            |                |
| Version 3 |            |               |                |



# LABORATORY AUDIT FSL/MQIP @ CORNELL UNIVERSITY 23 Version 02 Revised 11/6/2023

Effective 11/6/2023

#### **SECTION 7**

#### **APPENDIX A**

| Weekly Lab Audit   |                      |                   |   |  |  |  |  |
|--|----------------------|-------------------|---|--|--|--|--|
| TEAM:  |                      |                   | DATE:                                   |  |  |  |  |
| COMMON AREAS FOR AUDIT   | Meets<br>Requirement | Non<br>Compliance | ACTION TAKEN/COMMENTS/FOLLOW UP NEEDED? |  |  |  |  |
| Q-count area: Is the bench free of clutter?<br>Q-count covers on? Computers off?                                     |                      |                   |   |  |  |  |  |
| Tissue Culture Lab (350D): Are the biosafety cabinets free of clutter? Are the lights and blowers off if not in use? |                      |                   |   |  |  |  |  |
| Electrophoresis area: Does the bench paper need changed? Is the bench free of clutter?                               |                      |                   |   |  |  |  |  |
| Sequencing prep bench: Are there outdated reagents? Is the counter free of clutter?                                  |                      |                   |   |  |  |  |  |
| PCR Tube Racks: Are there racks to decontaminate?  |                      |                   |   |  |  |  |  |
| Gel imaging room (350B): Does the trash need emptied? Is the counter free of clutter?                                |                      |                   |   |  |  |  |  |
| RNA room (358B): Is the bench free of clutter?   |                      |                   |   |  |  |  |  |
| Autoclave Room (352D): Is there trash to dispose of? Are spent cultures ready to autoclave?                          |                      |                   |   |  |  |  |  |
| DNA isolation bench: Are there outdated reagents? Is the counter free of clutter?                                    |                      |                   |   |  |  |  |  |
| Bioanalyzer room (352C): Is the bench free of clutter?   |                      |                   |   |  |  |  |  |
| Computer area (354): Does the paper need to be recycled? Are the workstations tidy?                                  |                      |                   |   |  |  |  |  |
| Cold rooms (354C & 354D): Is the room tidy?  |                      |                   |   |  |  |  |  |
| Nanodrop area (354B): Are there outdated reagents? Is the counter free of clutter?                                   |                      |                   |   |  |  |  |  |
| Spiral Plating Bench: Are there outdated reagents? Is the counter free of clutter?                                   |                      |                   |   |  |  |  |  |
| Incubators (356C): Are there forgotten cultures present? Are cultures properly labeled?                              |                      |                   |   |  |  |  |  |
| PCR/Ribotyping/Real Time Room (356D): Are there outdated reagents? Is the bench free of clutter?                     |                      |                   |   |  |  |  |  |





# LABORATORY AUDIT FSL/MQIP @ CORNELL UNIVERSITY Effective 11/6/2023 Version 02 Revised 11/6/2023

| Spec room (352C): Is the bench free of clutter?  |                   |                            |                    |
|--|-------------------|----------------------------|--------------------|
| PCR prep room (358B): Is the bench free of clutter?  |                   |                            |                    |
| Package Receiving Area: Are boxes broken down? Is there stock to put away?   |                   |                            |                    |
| Freezer Room (355): Is the room tidy?  |                   |                            |                    |
| Benches: Are reagents, cultures, etc. properly labeled? Are there outdated reagents?                                   |                   |                            |                    |
| BSL Waste: Do the bins need emptied?  Does autoclaved waste need to be taken to the dumpster? Can waste be autoclaved? |                   |                            |                    |
| Recyclables: Are boxes broken down? Does the tip box recycling need to be emptied?                                     |                   |                            |                    |
| Water Baths & Centrifuges: Are they clean?   |                   |                            |                    |
| Fume Hoods (350C, 352C, 354B, & 356B): Are the hoods free of clutter? Are the hood sashes closed?                      |                   |                            |                    |
| REQUIRES FOLLOW UP:  | Issues needing fo | llow-up should be reported | to the Lab Manager |