Name of Policy: Laser and UV Light Safety **Policy Number**: 3364-107-403 Approving Officer: Medical Director, Clinical **Effective date:** 01/04/2025 Pathology **Original effective date**: 06/23/1992 **Responsible Agent**: Director, Clinical Pathology Administrative Director, Lab

Scope: Pathology Laboratory University of Toledo

Major revision of existing policy

Medical Center Key words: Laser, Ultraviolet Light (UV), authorized users, exposure symptoms, accidents reporting. New policy proposal Minor/technical revision of existing policy

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Reaffirmation of existing policy

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(A) Policy statement

Only authorized personnel shall be allowed to operate equipment utilizing laser and ultraviolet technology, such as the flow cytometer. Authorization may be obtained from the Section Coordinator or Clinical Lab Director.

(B) Purpose of policy

To provide guidelines for the safe operation of ultraviolet light and lasers on the laboratory instrumentation.

(C) Procedure

- 1. Before operating any lab instrument, all operators shall be required to review the operational and safety procedures found in the Instrument Procedure Manual with the Section Coordinator, including the Coherent Laser Manual (if applicable).
- 2. During routine operation always run the instrument with all safety interlocks and beam shutters in place and the sensor compartment door closed.
- 3. When it is necessary to operate the instrument with the beam un-shuttered and the sensor compartment open (for maintenance and alignment procedures) the following safety procedures should be followed:
 - (a) Post appropriate warning signs.
 - (b) Remove all reflective material from hands, i.e., rings, watches, etc.
 - (c) Never use reflective tools in sensor compartment when the beam shutter is open.
 - (d) Alignment or attenuating goggles should be worn during alignment procedures.
 - (e) Wear gloves and long sleeves when working with UV light-emitting sources.

- (f) Avoid placing hands in path of beam as this will result in laser burns to the skin.
- (g) Avoid reflection of the coherent beam out of the sensor compartment.
- 4. When it is necessary to remove the cover of the laser for maintenance, be sure the power has been turned off and disconnected. Never perform any maintenance within the laser with the interlocks defeated and the laser operating. If this type of work is required, call service.
- 5. An appropriate fire extinguisher shall be available at all times.
- 6. Symptoms of overexposure to laser or UV light, such as gritty or "sand in the eyes" sensation should be reported to Employee Health Services/Emergency Department.
- 7. Any accidents to personnel or property involving laser use shall be reported immediately to the Section Coordinator, Health & Safety Officer, or Laboratory Director so appropriate action can be taken.

| Approved by: | Policies Superseded by This Policy: • S-03 |
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| Name: Amira Gohara, M.D. Title: Medical Director, Clinical Pathology | Initial effective date: 06/23/1992 Review/Revision Date: 01/04/2025 |
| 1/10/2025 Date | Next review date: 01/04/2027 |
| Review/Revision Completed by: Joshua Otiso, Administrative Director, Lab | |