Biosafety Contract for µM.D. – ERL (updated 27 July 2018)

I,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, as a student worker in the Medical micro-Device Engineering Research Laboratory (µM.D. - ERL), have participated in Biosafety Training on \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. I understand I will have to repeat this training each semester to continue working in µM.D.–ERL. I have discussed, understood, and will abide by the following important safety practices:

\_\_\_\_\_ 1) I agree to not eat, drink, chew gum/tobacco, or handle contact lenses in the lab; I will only use mechanical pipetting devices and will not use my mouth; I will store food/drinks only in the student offices. I will store bags and other belongings in the hallway lockers outside the lab (bring own lock).

\_\_\_\_\_ 2) I agree to wear long pants & closed toed, full foot shoes at all times in the lab. Upon entering the lab, I will put on proper personal protective equipment (PPE) (lab coat, safety glasses, gloves). I agree to tie back long hair to ensure it does not pose a contamination carrier concern.

\_\_\_\_\_ 3) I know where the eyewash station and shower are located and how to use them. Sanaz, the laboratory manager, will coordinate our lab’s monthly testing and the university’s annual inspections.

\_\_\_\_\_ 4) In accordance with chemical safety, I will obtain SDSs for any chemical I order, date the SDS, place it in the lab’s SDS folder, and add the label to the proper storage cabinet (verify with Sanaz). Before handling or using any existing chemical, I will consult the SDS for proper handling guidelines. Dated SDSs are retired to another folder & kept for 30 years after chemical is gone.

\_\_\_\_\_ 5) I will dispose of chemicals in the proper hazardous waste container, which I will help keep clearly labeled with “HAZARDOUS WASTE,” the Resource Conservation and Recovery Act (RCRA) # with contents, name(s), date and keep the container capped at all times. The satellite accumulation area for this waste is next to the back chemical hood inside the plastic bin; flammable waste is stored on the designated blue mat in the flammables cabinet.

\_\_\_\_\_ 6) I will not handle broken glassware with my hands, but will instead use a broom & dustpan. I will place all sharps (slides, coverslips, glass pipettes, tips, capillary tubes, needles, etc.) in the biohazards sharps container. Date new sharps containers & dispose every 3 months with university pickups. NOTE: Precision tips are not needles and should not be discarded!

\_\_\_\_\_ 7) I understand contaminated sharps, any biofluids, solutions of biofluids, or materials that have come in contact with a biofluid, and all material in the biohazard disposal bag must be decontaminated by autoclaving/chemically treating with fresh (<1 week old) 10% bleach solution for >20 minutes before disposal (procedure next to building autoclave 🡪 sign usage log).

\_\_\_\_\_ 8) I will immediately report any spills or accidents to the supervisor, Dr. Minerick, and am familiar with the posted contact information. (Office: 906-487-2260, Cell: 231-2012, [minerick@mtu.edu](mailto:minerick@mtu.edu)). For small spills, I will wear full PPE plus protective gloves and use paper towels to clean up liquid. I will use the spill kit near the eyewash for large spills; spill pillows are also near back sink. For all spills, I will use a fresh 10% bleach solution (or 70% ethanol for any metal surfaces) to disinfect the entire area, allowing for >20 minutes of contact time, then place all materials in a labeled biohazard bag for disposal. Sharps injuries can be kept confidential between the injured, Dr. Minerick, and Jeff Lewin. A separate log will be kept and the injured should follow µM.D.-ERL’s Exposure Control Plan.

\_\_\_\_\_ 9) I will wash my hands before exiting the lab, after removing gloves, and before eating. Further, I will remove gloves and then wash my hands before touching the computer keyboards. This ensures contamination on the gloves is not transferred to doorknobs or other surfaces that are typically touched with a bare hand. Do not touch hand-washing sink with gloved hands.

\_\_\_\_\_ 10) I understand that gloves, a lab coat, and safety glasses must be worn at all times when handling any biofluid or equipment and that a facemask is available for centrifugation. Any researcher may request a respirator in place of the facemask. The centrifuge has sealed safety cups within which I will place my sample vial; when done, remove this entire cup & open it only in the Biosafety Cabinet (BSC).

\_\_\_\_\_ 11) I understand that all blood pipetting, solution preparation, and other must be completed in the BSC (all other PPE still applies) following BSC usage procedures.

\_\_\_\_\_ 12) When transporting biofluids to or from this lab, I will enclose it in a leak-proof plastic bag and then inside a padded container that prevents leakage. I will store all biofluids in the refrigerator (blood, tears)/freezer (plasma), as appropriate.

\_\_\_\_\_ 13) In accordance with IRB regulations, I will refer to blood and tear samples only by type and will not disclose the donor’s identity.

\_\_\_\_\_ 14) I will mark every chemical bottle with the date received and the day opened. I will label every vial or container with the contents, my name & the date. Any biofluid contents require a ‘**biohazard**’ sticker.

\_\_\_\_\_ 15) I will not use the same pen with my gloves in the lab as I use outside the lab. Contaminated pens are provided in the laboratory and cannot be removed. I will not place pens behind my ear or in my mouth. I will place my lab notebook or portable computer in a decontaminated area and minimize contamination to it. Wipe down with a towel soaked with 70% ethanol prior to exiting the lab.

\_\_\_\_\_ 16) I understand the microscopes, their controls & computers are not to be touched with contaminated gloves. The microscope’s stages are biohazard zones as are the microdevice electrical connectors & gloves must be worn when touching these two items. Place connectors in the biohazard labeled box. Gloves must be removed to touch all other areas of the microscopes & computers. Disinfection of the microscope’s stages must be done with 70% ethanol & not bleach to protect the equipment.

\_\_\_\_\_ 17) I agree to not answer or handle my phone while on the lab side of the orange line. Gloves must be removed and hands washed before answering any calls or texting. I will not use earphones; music may be played through the computer speakers.

\_\_\_\_\_ 18) I have been taught by Dr. Minerick or D. Dixon within the last 8 months how to properly remove gloves without contaminating my hands & will immediately place them in the biohazard disposal bin.

\_\_\_\_\_ 19) I will use only the lab coats provided and **will not exit the BL 2 labs wearing any PPE.** The blue lab coat must be used only to transport samples for other tests. Lab coats must be bleached prior to exiting the labs, after which they may be laundered. Coats are washed at the beginning of each semester.

\_\_\_\_\_ 20) I will decontaminate my work surface when I am done and will wipe off all work surfaces to decontaminate them **daily** and then sign the Decontamination Log located on the hallway µM.D.-ERL Message Center. I will decontaminate equipment, the Biosafety Cabinet and safety glasses with 70% ethanol and not bleach. Zainab will coordinate Decon Day assignments and it is my responsibility to complete entire lab decontamination on my assigned day. Safety glasses must be decontaminated monthly on a weekend. Anyone wearing contacts should place a red dot on the safety glasses.

\_\_\_\_\_ 21) I have begun/completed/declined the Hepatitis B shots. If I decline the HBV vaccine, I know I must provide a signed statement of declination (statement must be resubmitted each year so that any researcher feels comfortable to obtain the vaccine at any time). I have been advised to regularly request HIV tests and understand that this information remains confidential.

\_\_\_\_\_ 22) I feel comfortable discussing any safety concerns with Dr. Minerick and will not hesitate to express concerns to her.

\_\_\_\_\_ 23) I also agree to only allow visitors in the lab who have written or oral permission directly from Dr. Minerick and will ensure they abide by all BioSafety Level 2 practices. All visitors must sign the log. I understand this is for my safety and for the safety of my colleagues in the lab. For this reason, I will not allow my laboratory techniques to become negligent and endanger anyone’s health.

\_\_\_\_\_ 24) I have read/reread **Chemical Engineering’s Safety Manual** on \_\_\_\_\_\_\_\_\_\_\_\_ (date < 9 months). I have completed OSHA’s Bloodborne Pathogen Training Module and Quiz on \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (date within the last 9 months) and will remain certified during the entire current semester.

The Occupational Safety and Health Services website **(where Safety Data Sheets (SDS’s), safety guidelines, and all other safety resources are available)** is <http://www.admin.mtu.edu/fm/oshs> 906-487-2118.

Signature\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Signature of Supervisor (Adrienne Minerick) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_