**Equipment Name: Illumina MiSeq**

Before purchasing equipment, verify that the following requirements are, or can be, met:

| Requirement | Requirement Met? | Comments |
| --- | --- | --- |
| Electrical  100-110 V AC with 10-amp grounded dedicated line  OR  220-240 V AC with 6-amp grounded line | Yes  No |  |
| Wattage  400 Watts | Yes  No |  |
| Required Power Protection  Uninterrupted Power Supply  (APC Back-UPS Pro #BR1500G, recommended, other similar UPS acceptable) | Yes  No |  |
| Water  Access to one of the following types of laboratory grade water:  Illumina PW1  18 Megohm water  Milli-Q water  Super-Q water  Molecular biology-grade water | Yes  No |  |
| Waste  Create profile within CDC on-line Hazardous Waste Turn-In System | Yes  No |  |
| Ventilation  Sufficient for MiSeq thermal output of  1,364 Btu/h  Note: The thermal output of 1,364 Btu/h is for the MiSeq only; ventilation should be sufficient for the total thermal output of the room. | Yes  No |  |
| Operating Temperature Range  19˚-25˚C  Note: Verify with facilities that the temperature range is maintained 24 hours a day, 7 days a week; monitor prior to instrument arrival. | Yes  No |  |
| Operating Humidity Range  30–75% | Yes  No |  |
| Elevation  Below 2,000 meters (6,500 feet) | Yes  No |  |
| Air Quality  Pollution Degree II environment or better | Yes  No |  |
| Vibration Specifications   * Dedicated, sturdy, and immobilized lab bench without castors * No shaker, vortexer, centrifuge, heavy fans, etc. on same bench * Away from frequently-used doors * No keyboard tray below the bench * Do not touch the instrument or open the reagent compartment or flow cell compartment during sequencing. * Do not place objects on top of the instrument.   Note: Equipment is sensitive to vibrations. | Yes  No |  |
| Network Connections  Yes  No  Note: Use a 1 gigabit connection between the instrument and your data management system. This connection can be made directly or through a network switch. Upon connection to a network, configure Windows Update so that theMiSeq does not automatically update. Illumina recommends waiting one month after a Windows release before allowing an update. | Yes  No | If No, explain: |
| External Data Storage  Yes  No  Note: To request SciComp storage:   * Go to <http://info.biotech.cdc.gov/> * Click on “Support” * Click on “Sequencer Storage Request” * Complete form and submit | Yes  No | If Yes, specify (e.g. SciComp):  If No, explain: |
| Door/Elevator/Access Point Clearance  Crated Dimensions and Weight   * Height: 30.25 in * Width (side to side): 28.5 in * Depth (front to back): 33 in * Weight: 200 lbs | Yes  No |  |
| Lab Bench Requirements   * Width: 48 in * Height: 36 in * Depth: 30 in * Instrument Weight: 126 lbs * Casters: No | Yes  No |  |
| Operating Clearance  Instrument Dimensions   * Height: 20.6 in * Width (side to side): 27 in * Depth (front to back): 22.2 in * Weight: 126 lbs.   Clearance Requirements   * Back Clearance: 4 in * Side Clearance: 24 in (each side) * Top Clearance: 24 in * Usage Access: power switch on right side of instrument | Yes  No |  |
| Dedicated Physically Separate Areas  (If using MiSeq for sequencing PCR amplicons)  Dedicate physically separate pre-PCR laboratory space where pre-PCR processes are performed (DNA extraction, quantification, and normalization)  Dedicate physically separate post-PCR laboratory space where PCR products are made and processed  Dedicate separate full sets of equipment and supplies (pipettes, incubator, heat block, vortexer, centrifuge, etc.) to pre-PCR and post-PCR lab processes. Do not share equipment and supplies between processes  Dedicate separate storage areas (freezers and refrigerators) for pre-PCR and post-PCR consumables  Note: Do not use the same sink to wash pre-PCR and post-PCR materials. Do not share water purification systems for pre-PCR and post-PCR processes. Store all supplies used in pre-PCR protocols in the pre-PCR area, and transfer to the post-PCR area as needed. | Yes  No  N/A |  |
| Documentation  Training Documents  Equipment Maintenance Documents  Other: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | Yes  No |  |
| Ancillary equipment required  Access to or acquisition of the following:  Automated Liquid Handler (optional)  Thermocycler  Instrument for sizing, quantitation, and quality check of DNA (e.g.Bioanalyzer, TapeStation, Qubit)  Instrument for shearing DNA (e.g. Covaris) (optional depending on library prep method)  Benchtop centrifuge, plate centrifuge  Other: ­­­­­­­­­­­­­\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | Yes  No |  |
| Other Requirement(s)  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  N/A | Yes  No |  |

**\*References:** MiSeq System Guide Doc # 15027617 v01 Spetember 2015

**Completed By (signature): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Approved By (signature): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**