Laboratory Research Assistant Job Description

- Sterilize lab equipment using autoclaves, chemical disinfectants, or other methods
- Catalog lab supplies and track inventory levels to coordinate reorder timings
- Carefully measure out reagents, chemicals, or samples for use in experiments
- Use pipettes, burettes, or volumetric glassware to transfer precise liquid volumes
- Properly label storage containers according to established protocols
- Compile experimental data records in physical or electronic lab notebooks
- Enter numerical data into spreadsheets, databases or statistical programs
- Clean and prepare materials for sample collection procedures
- Assist with tissue, cell culture, or microbial sample collection and processing
- Examine samples under microscopes to locate or characterize features of interest
- Monitor conditions for live specimens involved in longitudinal studies
- Generate solutions, growth media plates, chemical buffers or other prep work
- Perform basic bench experiments like ELISA, titrations or cell counting
- Initiate or terminate cultures using bioreactors or similar equipment
- Run assays, collect output data and dispose waste materials appropriately
- Identify and address basic troubleshooting issues with lab equipment
- Participate in lab safety training activities to maintain up-to-date compliance
- Set up standard curves and calculate equation variables when needed

- Demonstrate techniques or procedures for new lab volunteers/trainees
- Coordinate routine calibration and maintenance for lab instruments
- Verify equipment logs, manuals, usage logs and maintenance records
- Check inventory supply levels and order new stocks before they run out
- Keep up-to-date on lab protocols, equipment manuals or usage guidance
- Report non-functioning equipment, safety issues or protocol deviations promptly
- Adhere to all workplace safety, ethics and professionalism standards.