Clark Atlanta University
Job Description

Position Title:	**Postdoctoral Fellow**
Employee:	
Department:	**CCRTD**
Reports To:	**Dr. Daqing Wu**

The following statements are intended to describe the general nature and level of work to be performed. They are not intended to be construed as an exhaustive list of all responsibilities, duties and skills required of personnel so classified.

General Function (Description):

A Postdoctoral Fellow position in cancer drug discovery is available immediately at the Center for Cancer Research and Therapeutic Development (CCRTD), Clark Atlanta University.

The candidate is expected to utilize structural biology, molecular, cellular and animal approaches. The fellow will design and conduct experiments, and report results in the formats of lab reports meeting abstracts, presentations, manuscripts, patent applications. The candidate will teach and train undergraduate students in the area of cancer biology and therapeutic development. Specifically, the fellow will work closely with student trainees in the following procedures:

1. Experiments in biochemistry and molecular biology: protein preparation and storage, ELISA, bioaffinity assays, DNA/RNA extraction, regular and real-time PCR, Western blot analysis, immunoprecipitation;
2. Experiments in cellular biology: use of microscopy in monitoring cell morphology, growth and responses; use of fluorescence microscopy of biomolecules distribution and co-localization;
3. *In vitro* drug screening: manual and automatic screening of potential drug candidates in cell cultures; effect of drug candidates on cancer cell signaling and gene expression; validation of drug targets;
4. *In vivo* drug analyses in animals: manage cancer xenograft colonies, inoculate tumor cells into mice, execute mouse experiments following the approved animal protocols, conduct drug administration through different routes (oral, intravenous, intraperitoneal, subcutaneous), isolate tissues from mice at the endpoint of the experiments, study the toxicity and pharmacokinetics of drug candidates using mice and rats;
5. Histopathology studies: perform immunohistochemistry and other assigned pathological analyses in animal and human tumor specimens;
6. In silicon evaluation of drug candidates: conduct computational analyses of drug candidates and their interaction with targets;
7. Keep meticulous records of all experiments performed and interpretate the obtained data;
8.

<u>Minimum Hiring Standards:</u>

Education	PhD and/or MD
Years of Experience Required	N/A
Years of Management/Supervisor Experience	Expertise in laboratory management and training is highly desired.