LC WORK SCHOLAR POSITION DESCRIPTION

Employment Levels

Entry Level	Intermediate Level	Skilled Level
Characterized by highly	Involves less direct	Work is typically skilled,
structured tasks or outcomes,	supervision than entry level,	requires little direct
relatively low level or number	more work variety, and	supervision, requires
of skills required, typically	requires some independent	independent judgment on
repetitive or routine tasks and	exercise of judgment along	procedures, has variety,
requiring direct supervision of	with an increasing knowledge	includes training others, and
worker results	of the job.	the expectation of
		contributions toward
		improvement of the way work
		is carried out.

In what employment level does this position fall (circle one)?						
	Entry Level	Intermediate Level	Skilled Level			
Work Scholar job title:	Air Chemistry /	Data Research Technician				

Describe the duties of this position.

Student will work in Dr. Johnston's Air Chemistry Research Lab where active research on various projects in the Valley and elsewhere are taking place. Focus is on measuring air pollution in areas of concern and reporting results to scientific community (and/or public).

One or two positions may be available - either laboratory technician and/or data technician.

Laboratory technician:

Collect air samples on campus, and in LC valley. Run air samples with GC-MS instrument Solution prep and standardization Data processing of samples

Data technician:

Quality checking raw data Organizing data Programming data to final form

Intermediate/Skilled:

Same as above, plus data graphing, statistics and interpretation. Same as above, plus archiving data online Students may take on individualized project of study.

List the learning opportunities for this position.

Laboratory technicians will learn to operate scientific instrumentation, and basic principles of chromatography, air pollution and chemistry. Laboratory skills such as solution preparation, electronic notebooking, calibration, field sampling, and data spreadsheets are employed.

Data technician will learn and apply database language such as "R" to our air research to make databases that are archivable for other scientists to use.

Opportunity for advanced learning in data processing and interpretation, as well as possible individualized research.

What qualifications are required for this position?

Sophomore or higher undergraduate, science major preferred.

Lab: Chemistry 111/112 preferred

Non-smoker preferred, due to air system contamination problems with smoking residues.

Data: Computer Science 111 or up preferred

What skills are required for this position?

Lab: Understands and is comfortable with basic math and computer entry. Data: Database coursework or understanding/use of R or similar language. Good attitude to work in a team.

Adapted with permission from Lewis-Clark Service Corps AmeriCorps and Berea College.