

## Production Internship

We are looking for energetic, self-starters who are interested in learning the pharmaceutical production process with hands on participation. This internship will allow you to participate directly in the production, purification and quality control aspects of research grade drug candidates that will be used in subsequent in vitro and in vivo studies. We work on tight timelines and demand the highest quality results. The right candidate will have the ability to use your chemistry and analytical skills in the everyday aspects of the production process. We use a significant amount of automation, so you will also be exposed to industry standard technology and QA/QC techniques. This role will report directly to the Production Manager and will be expected to record, analyze and present experimental data to other scientists at LBT labs.

### Roles

- Assist in Hybridtide production process including:
  - Automated peptide synthesis (microwave assisted peptide synthesis)
  - Peptide purification via RP-HPLC
  - QA/QC via LC-MS (mass spectrometry)
- Assist in management activities
  - Maintain production batch records & performance metrics
  - Maintain reagent and laboratory supply inventory
  - Integrate production process into data management software
- Participate in group meetings.

### What you'll need

- Previous laboratory experience working with chemicals is essential
- Ability to follow a defined workflow process while providing routine feedback
- Uber attention to all the details along with a routine schedule is essential
- For a summer internship, a minimum of 40 hours per week should be spent in the lab
- General knowledge of basic laboratory skills (pipetting, using an analytical scale and record keeping is expected)
- Experience with basic scientific calculations (Amount, Molarity, Percent composition, etc...) is required

## Tissue Processing Internship

We are looking for energetic, self-starters who are interested in learning the steps to determine the concentration of pharmaceutical agents in biospecimens. This internship will allow you to participate directly in research assays involving animal tissue handling, assay method development, and LC-MS/MS quantification of research grade drug candidates. We work on tight timelines and demand the highest quality results. The right candidate will have the ability to use their biological, chemical and analytical skills in the everyday aspects of this process. This role will report directly to the Associate Director of Clinical Neuroscience and will be expected to record, analyze and present experimental data to their supervisor and other scientists at LBT labs.

### Roles

- Method development of various extraction / quantification assays
  - Follow supervisor instruction
  - Liquid-liquid extraction techniques
  - Solid-phase extraction techniques
  - Ability to create and follow standard operation procedures (SOPs)
  - Provide organized, detailed notes for all experiments
- Use of liquid chromatography mass spectrometry system (LC-MS)
  - Creation of work lists within Agilent Software
  - Running standard curves of compounds for lower limit of quantification (LLOQ) determination
  - Quantification of analyte concentrations and subsequent analysis / statistics
  - Maintenance of LC-MS equipment
- Participation in group meetings

### What you'll need

- Previous laboratory experience working with standard laboratory techniques like weighing, pipetting, dilution equations, etc.
  - Preference given to candidates who have worked with biospecimens before
- Ability to follow a defined workflow process while providing routine feedback
- Attention to all details along with a routine schedule is essential
- For a summer internship, a minimum of 40 hours per week should be spent in the lab
- Knowledge of basic laboratory skills (pipetting, using an analytical scale and record keeping is expected)
- Experience with basic scientific calculations (Mass, Molarity, Dilutions, Percent composition, etc...) is required

## Peptide Stability Internship

We are looking for energetic, self-starters who are interested in learning the pharmaceutical lead optimization process with hands on participation. This internship will allow you to participate directly in the design, stability profiling and function evaluation of research grade drug candidates which will be used in subsequent in vitro and in vivo studies. We work on tight timelines and demand the highest quality results. The right candidate will have the ability to use chemical and analytical skills in the everyday aspects of the production and optimization processes. This role will have a dual-appointment between the Production Manager and the Associate Director of Clinical Neuroscience. Responsibilities include record, analyze and present experimental data to other scientists at LBT labs.

### Roles

- Assist in stability testing:
  - Run bench-top stability assays overtime
  - Prepare samples for liquid chromatography-mass spectrometry (LC-MS) analysis
  - Analyze LC-MS data qualitatively and quantitatively
- Assist in functional testing:
  - Practice in vitro sterile techniques
  - Use specially engineering cell lines to quantify receptor activation levels
  - Perform in vitro assay and processing techniques
  - Analyze luminescence data via a plate reader and analyze results
- Draw conclusions on stability & functionality to guide next generation designs
- Data management
  - Compile newly collected, as well as archived, data into online Laboratory Information Management (LIMs) repositories.
- Participate in group meetings.

### What you'll need

- Previous laboratory experience working with standard laboratory techniques like weighing, pipetting, dilution equations, etc.
  - Preference given to candidates who use sterile culture techniques regularly
- Ability to follow a defined workflow process while providing routine feedback
- Attention to all details along with a routine schedule is essential
- For a summer internship, a minimum of 40 hours per week should be spent in the lab
- Knowledge of basic laboratory skills (pipetting, using an analytical scale and record keeping is expected)
- Experience with basic scientific calculations (Mass, Molarity, Dilutions, Percent composition, etc...) is required

## Scientific Data Management Internship

We are looking for energetic, self-starters who are interested in learning and developing statistical processes to organize pharmaceutical and clinical data. This internship will allow you to participate directly in the analytical and organizational aspects of current incoming clinical data. We work on tight timelines and demand the highest quality results. The right candidate will have the ability to use your analytical skills in the everyday aspects of the data collection processes. This role will report directly to the Associate Director of Clinical Neuroscience and will be expected to record, analyze and present experimental data to other scientists at LBT labs.

### Roles

- Assist in bioinformatic data analysis:
  - Perform various statistical data analysis techniques (ANOVA and much more)
  - Develop data driven insights using state of the art Artificial Intelligence techniques
  - Combine, normalize and analyze various experimental data (clinical & analytical)
- Assist in data management activities
  - Upload and organize multi-component clinical data into database management software
  - Help standardize data structures and exporting processes
  - Develop automated data processing techniques
- Participate in group meetings.

### What you'll need

- Previous laboratory experience working with bioinformatic and statistical analysis is essential (e.g. ANOVA, T-test, Parametric analysis, Clustering, Principle component analysis and more)
- Ability to follow a defined workflow process while providing routine feedback
- Attention to all the details along with a routine schedule is essential
- For a summer internship, a minimum of 40 hours per week should be spent in the lab
- Experience with R, SPSS, Matlab and Python is preferred