

# LIV PROCESS, INC.

## JOB DESCRIPTION

|                          |  |                   |                      |   |           |                                 |     |
|--------------------------|--|-------------------|----------------------|---|-----------|---------------------------------|-----|
| <b>Job title:</b>        | Research Scientist & Lab Manager   |                   |                      | <b>Date:</b>                              | 2/27/2023 |                                 |     |
| <b>Supervisor title:</b> | Megan Touchette, Ph.D., Senior Director of Research & Development        |                   |                      |   |           |                                 |     |
| <b>Department:</b>       | Research & Development   |                   | <b>Job Location:</b> | The Engine, 750 Main Street Cambridge, MA |           |                                 |     |
| <b>HR contact:</b>       | Lyndsay Pocerobba, VP of Corporate Communications and Product Management |                   |                      |   |           |                                 |     |
| <b>Position type:</b>    | Salary   | <b>Pay range:</b> | \$90,000-\$100,000   | <b>Travel required:</b>                   | No        | <b>Will train applicant(s):</b> | Yes |

### COMPANY SUMMARY

LIV Process was inspired to revolutionize the deadly impact *Clostridioides difficile* (*C. diff*) has on the world. Almost four people die every hour from a *C. diff* infection and the LIV Process team recognized the significant shortcomings surrounding detection of deadly *C. diff* spores on surfaces. LIV Process worked with three of the leading *C. diff* spore experts in the world to invent a transformative, proprietary method that rewrites the blueprint for pathogen surface surveillance.

Our PURPOSE is to SAVE LIVES NOW. LIV Process' vision is to take its breakthrough solution and become the global leader in surface detection solutions, raise the standards for infection control globally, and find partners that help us achieve these goals better, faster, with great urgency. Awareness of infection control importance is at an all-time high as the world continues to battle with and recover from the COVID-19 pandemic.

For more information, please visit: [www.livprocess.com](http://www.livprocess.com)

### Job Summary

The individual in this Research Scientist position will conduct a variety of experiments following established procedures and protocols, which may include DNA extraction and purification from microbiologically complex samples, as well as microbiological and biochemical analyses of *C. difficile*, other spore-forming organisms, and other nosocomial pathogens. This individual will record test results, analyze data, maintain laboratory equipment and supplies, present at meetings, and ideally will contribute to the assay development, data collection, analysis, and writing of standard operating procedures.

### Essential Functions:

| Essential Functions:  | %   |
|---|-----|
| <ul style="list-style-type: none"> <li>Plans and executes experiments that will require a variety of microbiology, biochemistry, and molecular biology studies of <i>C. difficile</i> spore detection. Techniques include anaerobic culture, DNA extraction and purification, PCR, and fluorescence detection analyses. Training will be provided.</li> </ul> | 50% |
| <ul style="list-style-type: none"> <li>Records results and maintains accurate records of experiments. Collects, compiles, and assists in analyzing research data and writing reports, including the use of basic statistics; performs literature searches and integrates information into experimental planning and data analysis.</li> </ul>                 | 20% |
| <ul style="list-style-type: none"> <li>Maintains meticulous notes and files to include research results, protocols, methods, and other documentation. Assist in the planning, design, and development of new protocols and experiments.</li> </ul>  | 10% |
| <ul style="list-style-type: none"> <li>Maintains laboratory equipment and orders/keeps inventory of supplies. Helps monitor receipt and purchasing of lab supplies. Provides oversight for the safe operation of the lab.</li> </ul>  | 5%  |

|  |     |
|--|-----|
| <ul style="list-style-type: none"> <li>Provides functional support for laboratory personnel in the form of helping keep the lab organized and well-stocked; may assist with experiments of members within the lab or help with common equipment, e.g. freezer defrosting.</li> </ul> | 10% |
| <ul style="list-style-type: none"> <li>Attends one-on-one and team meetings and lab management-related meetings. Presents data where appropriate.</li> </ul>   | 5%  |
| <p><b><i>This description is not intended to be all-inclusive.<br/>Employee may perform other duties as assigned to meet the ongoing needs of the organization.</i></b></p>  |     |

|  |  |
|--|--|
| <p><b>MINIMUM REQUIRED EXPERIENCE, EDUCATION, BACKGROUND, AND CERTIFICATIONS/LICENSES</b></p>  |  |
| <ul style="list-style-type: none"> <li>Bachelor's degree in science with 7+ years biotechnology and/or pharmaceutical industry experience.</li> <li>Documented track record of research in more than one of the following areas: microbiology, molecular biology, anaerobic culture, fluorescence detection methods, and assay development.</li> </ul>   |  |
| <p><b>Additional Preferred Experience, Education, etc.</b></p>   |  |
| <ul style="list-style-type: none"> <li>Familiarity with basic laboratory techniques and procedures including DNA extraction/purification, DNA sequencing, and PCR are highly desirable.</li> <li>Experience working with nanoparticles and methods to characterize them is also highly desirable.</li> <li>Ability to develop and optimize assays.</li> <li>Experience keeping meticulous records and writing standard operating procedures.</li> <li>Ability to communicate science technically as well as to a non-scientific audience.</li> <li>Experience managing basic laboratory functions including but not limited to ordering reagents, inventory maintenance, and waste management.</li> <li>The candidate must be self-motivated, possess analytical skills, and be vested in the scientific endeavor.</li> <li>The position requires someone who is reliable, conscientious, organized, willing to learn, and can effectively manage changing priorities.</li> <li>An ideal candidate will demonstrate high levels of creativity, problem solving, and can collaborate effectively throughout the company.</li> </ul> |  |

## PHYSICAL AND MENTAL REQUIREMENTS:

THE AMERICANS WITH DISABILITIES ACT REQUIRES EMPLOYERS TO MAKE REASONABLE ACCOMMODATIONS FOR A PERSON WITH A DISABILITY. THE INFORMATION BELOW IS NEEDED TO ASSIST LIV PROCESS IN MEETING THESE REGULATIONS.

CLICK ALL THAT APPLY:

### **Physical Demands:**

- |  |   |  |  |
|--|---|--|--|
| <input checked="" type="checkbox"/> Standing | <input checked="" type="checkbox"/> Lifting _____ lbs.  | <input checked="" type="checkbox"/> Pushing/Pulling    | <input checked="" type="checkbox"/> Seeing   |
| <input checked="" type="checkbox"/> Walking  | <input checked="" type="checkbox"/> Carrying _____ lbs. | <input checked="" type="checkbox"/> Squatting/Kneeling | <input checked="" type="checkbox"/> Hearing  |
| <input checked="" type="checkbox"/> Reaching | <input checked="" type="checkbox"/> Writing             | <input type="checkbox"/> Driving                       | <input checked="" type="checkbox"/> Speaking |
| <input checked="" type="checkbox"/> Climbing |   |  |  |
| <input type="checkbox"/> Other:              |   | <input type="checkbox"/> Other:                        |  |

### **Physical Environment:**

- |   |   |                                    |   |
|---|---|------------------------------------|---|
| <input checked="" type="checkbox"/> Chemicals                             | <input type="checkbox"/> Carcinogens                | <input type="checkbox"/> Dirt      | <input type="checkbox"/> Animal Tissue/Fluids |
| <input checked="" type="checkbox"/> Biohazardous Materials                | <input checked="" type="checkbox"/> Toxic Chemicals | <input type="checkbox"/> Radiation |   |
| <input type="checkbox"/> Other: <a href="#">Click here to enter text.</a> |   | <input type="checkbox"/> Other:    |   |

### **Mental Demands:**

- |   |   |   |  |
|---|---|---|--|
| <input checked="" type="checkbox"/> Detailed Work                         | <input checked="" type="checkbox"/> Reading           | <input checked="" type="checkbox"/> Frequent Deadlines        | <input checked="" type="checkbox"/> Frequent Interruptions |
| <input checked="" type="checkbox"/> Periods of Concentrated Attention     | <input type="checkbox"/> Frequent Contact with People | <input checked="" type="checkbox"/> Multiple Concurrent Tasks |  |
| <input type="checkbox"/> Other: <a href="#">Click here to enter text.</a> |   | <input type="checkbox"/> Other:                               |  |

### **Occupational Exposure:**

- |   |   |   |                                   |
|---|---|---|-----------------------------------|
| <input type="checkbox"/> Research/Lab Animals                             | <input type="checkbox"/> Domestic Animals | <input type="checkbox"/> Livestock/Horses                                 | <input type="checkbox"/> Wildlife |
| <input type="checkbox"/> Other: <a href="#">Click here to enter text.</a> |   | <input type="checkbox"/> Other: <a href="#">Click here to enter text.</a> |                                   |

**Working conditions:** (Consider exceptional working conditions, travel requirements, non-standard work schedule, etc.)

It may be necessary to lift or move moderately heavy objects (i.e. gas cylinders, 20-40 lbs.), to climb up ladders to reach objects on shelves, and to carry out non-strenuous but repetitive activities such as pipetting. The candidate is expected to work semi-independently and will be trained to work safely with potentially dangerous chemicals and pathogenic microorganisms (*Clostridioides difficile*). The candidate must be able to communicate clearly to work effectively with others and to carry out experiments. The individual will work with agents that if improperly handled will pose a hazard to others.