Job title	*Senior Research Associate (SRA): Biology & Field Research*
Reports to	*Research Scientist*
Date	*December 2019*

Job purpose

The Biology & Field Research, SRA position will:
- Progress PowerPollen's research theory and validation into scaled up commericial seed production capabilities for customers   Executing against and enabling company goal achievement through the lab and field operations.
- Design and develop organizational data processes including; scientific data protocols, data analysis methodologies and interpretations, data maintance, security and interpretations.

Duties and responsibilities

Biology research theory & validation

Facilitate up-scaling through management of lab, growth chamber and field activities
- Lab:
    - Follow safety and asepthic protocols.
    - Accurately calculate, translate and prepare large scale dillutions, and solutions from small concentrations.
    - Utilize best practice laboratory skills to study and prepare cell cultures utilizing germination media, sterilizers, stereoscope, microscope and other related microbiology tools and techniques.
    - Keep detailed record of activities and enter process modifications in laboratory notebooks.
    - Collaborate with other team members in complex projects synchronizing activities for best use of resources.
    - Produce reports and data summaries

- Field:
    - Follow safety protocols and positively encourage other team members to do the same.
    - Oversee experiment execution, management of the treatment preparation and application. Ensure proper use of controls and experiment data integrity.
    - Review and understand field research objectives before execution.
    - Ensure experimental methods are followed properly by field crews.
    - Closely work with the field operations leader to identify, source and secure field collaborators to partner.
    - Ensure testing grounds are adequate for the company's larger and increasing testing and demonstration activities
    - Help design, implement and monitor process with collaborators including; logistics and materials receipt and transfer.
    - Coordinate plant sample collection, storage and manipulation.

- Keep detailed record of activities and produce reports and data summaries
- Establish,nurture and maintain relationships with key stakeholders such as; land owner/farmer/growers, equipment providers, labor management vendors and providers, local AG community stakeholders.
- Execute against precise science plans and company goals while gathering and providing solid input for process enhancement and improvement.
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Data Management

- Design, maintain, enhance a centralized and flexible organizational science database
- Establish and monitor protocols for data integrity as it is passed from science team into the database
- Translate complex scientific data into terminology suitable for various scientific and non-scientific audiences.
- Conduct data analysis for team members including; reading, cleaning, interpreting and summarizing data
- Assist team members in assuring protocols of experiments align with data analysis expectations. Assure that the purpose of the analysis is based on true questions of the experiments conducted.
- Prepare data summary presentations for various members of the team, leadership team, Board members or other key stakeholders as requested. This may include statistical graphs, plots, projections and modelling.
- Assist with experiments, experimental design and data collection as needed.

Qualifications

- Preferred MSc in life sciences and 1-2 years of industry experience in a science related role. BSc with additional industry experience will be considered.
- Positive and driven, highly organized and with a problem-solving attitude

- Experience with plant cell analytical methods including flow cytometry, mass spec; single cell viability testing, and enzyme activity quantification. Familiarity with instrumental analysis.
- Relevant experience with isolating, culturing, and freezing cells will be an advantage.
- Resourceful: able to build and maintain a network allowing for continued advancement and scaling of company capabilities
- Previous experience overseeing teams, crews including employees and contracted labor.
- Experience working with statistics and conducting statistical analysis including use of tools such as: JMP, Minitab, Excel, statistical graphing tools, e-Labs, cloud based storage systems
- Experience working with experiments and experimental design
- Capable and comfortable presenting to company leadership on key areas of accountability, providing insight, lessons learned, enhancements, issues and resolution proposals.
- Capable and interested in working in an environment that includes indoor lab conditions and outdoor agricultural conditions throughout the year.
- Flexible and motivated to work in a start-up technology environment
- Capable of seeing a barrier or issue as an opportunity to overcome a challenge.
- Self-motivation and independent drive with an ability to work with highly effective teams

Working conditions & Physical Requirement

This position will work in varying conditions including normal laboratory setting to typical in-season agricultural environment. This includes working in crop fields when weather conditions are extremely hot/humid and insects are present.

The position may demand extensive periods standing, walking and includes significant time using a computer keyboard and screen.

May need to lift up to 50 lbs.

Travel

Although this position is based in Santa Isabel Puerto Rico, it does require extended periods of time in the continental US. Most likely Midwest and Texas.

This position requires travel 30-40% of the time out of Puerto Rico; in some cases for several weeks at a time.

Travel periods would be mostly in months of May-August.

Company will provide accommodations outside Puerto Rico

Contact Information

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 https://powerpollen.com/

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