



## **Scientist, Nanotechnology/Materials Science**

*Karma Biotechnologies - Torrance, CA*

### **THE COMPANY**

Karma Biotechnologies is a Los Angeles startup dedicated to solving autoimmunity, allergies, and food sensitivities with their Xavine™ tolerogenic therapeutics platform. As general immune suppression is considered the standard of care for most autoimmune diseases, there remains a critical unmet need to develop a precision immunology approach that inhibits only the disease-causing rogue immune cells. To meet this need, Karma is leveraging expertise in immunology and lipid nanoparticle engineering to develop Xavines™ designed to elicit antigen-specific immune tolerance in vivo.

**Karma is now looking to expand their staff and is seeking a scientific leader in Nanotechnology/Materials Science. Having successfully completed initial seed financing rounds (first round of venture funding in Q4, 2019, and second round in Q4, 2021) Karma will grow to 10 people in 2022.**

### **POSITION RESPONSIBILITIES**

- Design and validate the next generation of lipid nanoparticles to support Karma's Xavine™ program.
- Spearhead experiments to develop, evaluate and characterize novel lipid nanoparticle formulations for payloads including RNA, protein, and small molecule therapeutics.
- Lead experiments to confirm robust process performance.
- Characterize nanoparticle properties and prepare technical reports with analysis and data interpretations through findings, summaries, and report conclusions.
- Provide technical representation and subject matter expertise in formulations, process, and analytical investigations for nanoparticle-based products.
- Identify appropriate lipids to optimize formulations specific for the encapsulation of various payloads (e.g., DNA, RNA, protein) and their delivery to cells in vitro.
- Support development of novel characterization techniques to characterize lipid nanoparticles to support process development and formulation design.

- Optimize scalable, repeatable, and robust manufacturing processes that require nanoparticle production and purification.

## CANDIDATE QUALIFICATIONS

- A Ph.D. or Masters in Material Science, Chemistry or Nanotechnology would be preferred.
- 3+ years of experience in nanoparticle delivery technologies or nucleic acid drug development.
- Experience with nanoparticle characterization techniques or drug delivery systems would be a plus along with a solid understanding of lipid nanoparticle technologies.
- Experience with or familiarity of biophysical and light scattering techniques, like DLS, NTA, PCR.
- Familiarity with cell culture techniques, and specific experience with PCR-based assays, fluorescence microscopy and flow cytometry will be crucial for analyzing results and elucidation of mechanisms of cellular delivery.

## WORKING AT KARMA

Karma is a small company with a big mission. People thrive at Karma with their passion for science, relentless commitment to our goal of solving autoimmunity, and collaboration throughout a small, tight-knit team. Karma promotes autonomy as fuel for creativity and innovation. We encourage our employees to create and explore new avenues to advance Karma's mission.

Beyond offering an opportunity to make your mark as a scientist, Karma offers the following:

- Competitive salary - We want you concentrating on your next experiment, not stressing about rent.
- Stock options - When Karma succeeds, you succeed.
- Medical and vision insurance - We know that your health comes first, including mental health.
- Generous vacation policy - Work is a big part of life. It's not life.
- Flexible schedules - We understand that traffic is a thing, that you probably have a family and friends and other passions, and that greatness doesn't always follow a schedule.

To apply, please send your resume and cover letter to:

**Alan Johnson**

**HEAD OF HR**

**hiring@karmabiotech.com**

