**Vor Biopharma** is a preclinical biotechnology company founded by leading scientists (including Siddhartha Mukherjee), and backed by top venture capital firms. Vor is developing targeted therapies based on engineered hematopoietic stem cells that are designed to transform outcomes for cancer patients. To date, targeted therapies have applied to a limited set of cancers due to off-target effects on healthy tissues. Vor's technology eliminates effects on healthy tissues, thereby dramatically increasing the druggable target space across a range of cancer types.

**Position Description:**

**Scientist/Sr. Scientist Molecular & Cell Biology**

The successful candidate will lead a project aimed at developing molecular biology tools to evaluate off target profiles for Vor’s engineered hematopoietic stem cell products. This will involve design and execution of an experimental plan comprised of fundamental molecular biology, cellular engineering and cellular and biochemical assay optimization to identify genome editing efficiency of CRISPR and other genome editing nucleases and their off-targets.

**Key areas of responsibility:**

- Develop and optimize assays to identify efficiency of genome editing nucleases in hematopoietic stem cells and other cell lines.
- Prepare sequencing libraries for amplicon sequencing, GUIDE-seq, Digenome, Hybrid Capture, CIRCLE-seq or other off-target analysis approaches.
- Profile gene expression signatures in bulk or single cell populations using qPCR, ddPCR and RNA-seq.
- Generate editing reagents using Gibson, USER assembly or other relevant cloning strategies.
- Primary/stem cell (human CD34+ HSPCs, iPSC) and mammalian cell line culture.
- Coordinate with internal collaborators and external contract research as needed.
- Design experiments, interpret data, and problem solve with a high level of independence and creativity to advance company's hematopoietic stem cell therapy platform.
- Review, interpret and communicate data across functions within the research and/or project teams.
- Understands project timelines and deliverables and plans/coordinates project work accordingly with departmental, functional and external stakeholders.
- Draft standard operating procedures, work instructions, test methods, study protocols, and technical reports.
- Create presentations and present progress to senior management.
- Maintain a clear, detailed laboratory notebook to document all experiments and findings.
- Comply with best safety practices.
Qualifications:

- Ph.D. in biological science or related discipline with 3-6 years of postdoctorate experience or 2-4 years of experience in biotech or pharma
- Strong scientific background and publication record with proven high levels of performance
- Previous experience identifying off-target sites using GUIDE-seq, Digenome-seq, CIRCLE-seq or other is strongly preferred
- Lab skills and technical background of gene editing tools and principles (ZFN, TALEN, CRISPR, or DNA base editors). Optimizing CRISPR/Cas9-based gene editing is strongly preferred.
- Library preparation for whole genome, amplicon sequencing or transcriptome library preparation – bulk or single cell RNA-seq – is strongly preferred
- Experience in primary/stem cell and mammalian cell line culture (iPSC or HSPC experience a plus)
- Excellent written communication skills and the ability to present effectively to teams with diverse scientific backgrounds
- Ability to work independently while also building relationships with colleagues