



Scientist / Senior Scientist, Discovery Research - Ion Channel Biochemistry

Company:

Visterra is a clinical stage biotechnology company committed to developing innovative antibody-based therapies for the treatment of patients with kidney diseases and other hard-to-treat diseases. Our proprietary technology platform enables the design and engineering of precision antibody-based product candidates that specifically bind to, and modulate, key disease targets. Applying this technology to disease targets that are not adequately addressed by traditional therapeutic approaches, we are developing a robust pipeline of novel therapies for patients with unmet needs. Our most advanced program is in Phase 2 clinical development.

Visterra is a wholly-owned subsidiary of Otsuka America, Inc., which is a U.S. holding company and a wholly owned subsidiary of Otsuka Pharmaceutical Co., Ltd. of Japan. Visterra has approximately 50 employees and is located in Waltham, Massachusetts.

Summary:

Visterra is seeking a highly motivated **Scientist / Senior Scientist** with a research background in ion channel biophysics and biochemistry. This individual will play a key scientific role in the discovery of therapeutic antibodies to ion channel and other membrane protein targets by developing research strategies to discover candidate functional antibodies, optimizing and implementing methods to facilitate such discovery, and performing detailed characterization of candidate antibodies, including mechanism of action. The successful candidate will have an innovative mindset, be a collaborative team player, possess strong analytical skills, and be adaptable to new methods and approaches. The ideal candidate should have an advanced degree in biophysics, biochemistry or related field with significant previous experience in ion channel electrophysiology and protein biophysics/biochemistry. This is a full-time position located at Visterra's site in Waltham, MA.

Key duties and responsibilities:

- Design and develop methods and approaches in the laboratory to support research, discovery, and characterization of therapeutic antibodies to ion channels and other membrane protein targets
- Lead key activities in the functional testing of antibodies to ion channels, such electrophysiology (including automated patch clamp) and other biological testing
- Contribute to research team activities supporting therapeutic antibody discovery, including antibody-antigen interaction characterization (affinity, specificity, etc.), recombinant protein production and purification, antibody library display screening, and functional cell assays
- Manage activities at contract research organizations (CROs) as needed



- Analyze and summarize key data sets, results and research updates for internal review and possibly for use in regulatory or patent filings or publication in peer-review journals
- Independently troubleshoot methods and conceive creative solutions and workflows to address challenges
- Provide scientific and technical expertise to other research projects at Visterra
- Operate effectively and collaboratively in a team-oriented research and development organization
- Maintain expertise in the field by staying current to literature and attending relevant conferences

Minimum Qualifications

- A Ph.D. or equivalent degree in biophysics, biochemistry or related field with 2+ years (PhD) post-graduate research experience
- Strong foundation in ion channel biophysics and biochemistry research
- Demonstrated experience with a variety of patch clamp techniques with multiple ion channels, including voltage- and ligand-gated channels
- Demonstrated experience of critically analyzing and distilling complex scientific problems and conceiving creative solution strategies
- Demonstrated ability to work closely and collaboratively with a team
- Proven track record in molecular biology, e.g., PCR, cloning, mutagenesis, and primer design
- Excellent critical thinking and analytical skills
- Strong verbal and written communication skills
- Detail-oriented, organized, team-oriented, enthusiastic and flexible

Preferred Qualifications:

- Publication track record in ion channel biophysics/biochemistry field
- Experience with automated patch clamp
- Experience with primary cell or iPSC culture and electrophysiology
- Experience with ion channel or other membrane protein expression and purification
- Experience characterizing ion channel structure-function relationships
- Basic ability to model and analyze ion channel structure
- A working understanding of antibodies and their structure and function

Management responsibilities: This position may include supervisory responsibilities

Travel: Possible travel to local and national conferences



Visterra provides equal employment opportunities to all employees and applicants for employment and prohibits discrimination and harassment of any type without regard to race, color, religion, age, sex, national origin, disability status, genetics, protected veteran status, sexual orientation, gender identity or expression, or any other characteristic protected by federal, state or local laws.