

**Title: Senior Scientist, Computational and Structural Chemistry (X-ray crystallography, Cryo-EM)**

**Job Description**

New hires based in the US & Puerto Rico will be required to demonstrate that they have been fully vaccinated for COVID-19 or qualify for a medical or religious exemption or accommodation to this vaccination requirement, subject to applicable law.

We are seeking a creative, self-motivated structural biologist with exceptional interpersonal and problem-solving skills to join the Computational and Structural Chemistry (CSC) group in West Point, PA, USA. CSC is a diverse and inclusive team of approximately 110 structural scientists, computational chemists, informaticians, mass spectrometrists, biophysicists, and protein scientists who employ state-of-the-art capabilities to drive drug design. We are an integral arm of both discovery and process chemistry and collaborate seamlessly with teams around the globe to innovate and invent better molecules faster.

We are looking for an accomplished structural biologist who will support drug discovery through the generation and analysis of atomic-resolution macromolecular structures determined by X-ray crystallography or single-particle Cryo-EM. The successful candidate will join our growing CSC team and will be responsible for all aspects of the structural biology process, from sample preparation and data collection through data processing, structure determination, and effective communication of structural analyses with key stakeholders.

The structural biologist will be capable of working independently to design, carry out, and interpret experiments required to test hypotheses and will work closely with cross-functional drug discovery teams. In addition, the successful candidate will establish productive and collaborative interactions with other members of the global CSC department and leverage

external collaborations and exchange with the wider scientific community to keep our team at the cutting edge of the structural biology and structure-based drug discovery fields. The structural biologist is expected to foster and contribute to a culture of diversity and inclusion where colleagues and partners feel comfortable bringing their unique perspectives to work. Consistently cited as a great place to work, our company employs talented people who discover, develop, manufacture, and market a wide range of vaccines and medicines to address unmet medical needs. Each of us is joined by an extraordinary sense of purpose — bringing our company's finest achievements to people worldwide.

### **Required Experience and Skills**

- Ph.D. in structural biology, biochemistry, or related field.
- Demonstrated experience in X-ray crystallography or atomic resolution single-particle Cryo-EM, including sample preparation, data collection, data processing and structure determination and refinement.
- Proven track record of outstanding scientific skills as exemplified by a strong publication record.
- Demonstrated potential to develop project management skills and identify/develop new areas of scientific expertise in structural biology.
- Excellent written and oral communication skills that enhance team-based progress.
- Ability to work effectively and flexibly within timelines.

### **Preferred Experience and Skills**

- One or more years of successful post-doctoral experience in structural biology using X-ray crystallography or cryo-EM.

- Experience with sample preparation, data collection, data processing, and structure determination using both X-ray crystallography and single-particle Cryo-EM.
- Experience with ligand co-crystallization and ligand soaking as well as crystal seeding methodologies.
- Experience with structure determination of small molecule protein complexes, membrane proteins, and multi-subunit protein complexes.
- In-depth knowledge of current biophysical and functional characterization methods (e.g. SPR, BioNMR, thermal shift, ligand-binding, and calorimetric assays) to guide construct design and optimization.
- Experience with protein engineering, including the use of computational tools.
- Scientific programming skills (e.g. Python) and interest in the application of computational tools to answer structural biology questions.

We are a research-driven biopharmaceutical company. Our mission is built on the simple premise that if we “follow the science” that great medicines can make a significant impact to our world. We believe that a research-driven enterprise dedicated to world-class science can succeed by inventing medicine and vaccine innovations that make a difference for patients across the globe.

### **Who we are ...**

We are known as Merck & Co., Inc., Kenilworth, New Jersey, USA in the United States and Canada and MSD everywhere else. For more than a century, we have been inventing for life, bringing forward medicines and vaccines for many of the world's most challenging diseases. Today, our company continues to be at the forefront of research to deliver innovative health

solutions and advance the prevention and treatment of diseases that threaten people and animals around the world.

### **What we look for ...**

In a world of rapid innovation, we seek brave Inventors who want to make an Impact in all aspects of our business, enabling breakthroughs that will affect generations to come. We encourage you to bring your disruptive thinking, collaborative spirit and diverse perspective to our organization.

### **NOTICE FOR INTERNAL APPLICANTS**

In accordance with Managers' Policy - Job Posting and Employee Placement, all employees subject to this policy are required to have a minimum of twelve (12) months of service in current position prior to applying for open positions.

If you have been offered a separation benefits package, but have not yet reached your separation date and are offered a position within the salary and geographical parameters as set forth in the Summary Plan Description (SPD) of your separation package, then you are no longer eligible for your separation benefits package. To discuss in more detail, please contact your HRBP or Talent Acquisition Advisor.

### **Residents of Colorado**

[Click here](#) to request this role's pay range.

Current Employees apply [HERE](#)

Current Contingent Workers apply [HERE](#)

### **US and Puerto Rico Residents Only:**

Our company is committed to inclusion, ensuring that candidates can engage in a hiring process that exhibits their true capabilities. Please [click here](#) if you need an accommodation during the application or hiring process.

For more information about personal rights under Equal Employment Opportunity, visit:

[EEOC Poster](#)

[EEOC GINA Supplement](#)

[OFCCP EEO Supplement](#)

[Pay Transparency Nondiscrimination](#)

We are proud to be a company that embraces the value of bringing diverse, talented, and committed people together. The fastest way to breakthrough innovation is when diverse ideas come together in an inclusive environment. We encourage our colleagues to respectfully challenge one another's thinking and approach problems collectively. We are an equal opportunity employer, committed to fostering an inclusive and diverse workplace.

### **Search Firm Representatives Please Read Carefully**

Merck & Co., Inc., Kenilworth, NJ, USA, also known as Merck Sharp & Dohme Corp., Kenilworth, NJ, USA, does not accept unsolicited assistance from search firms for employment opportunities. All CVs / resumes submitted by search firms to any employee at our company without a valid written search agreement in place for this position will be deemed the sole property of our company. No fee will be paid in the event a candidate is hired by our company as a result of an agency referral where no pre-existing agreement is in place. Where agency agreements are in place, introductions are position specific. Please, no phone calls or emails.

**Employee Status:**

Regular

**Relocation:**

Domestic/International

**VISA Sponsorship:**

Yes

**Travel Requirements:**

10%

**Flexible Work Arrangements:**

**Shift:**

**Valid Driving License:**

**Hazardous Material(s):**

**Number of Openings:**

1

**Requisition ID:**R154417

