Senior Scientist, Molecular Simulations

Zymeworks is a fast-growing biotechnology company dedicated to the research, development and commercialization of best-in-class therapeutic bispecific antibodies and antibody drug conjugates for the treatment of cancer and autoimmune diseases. Zymeworks is proud to have active collaborations with Merck & Co., Inc., Eli Lilly and Co., and Celgene Corporation, and is committed to making a meaningful difference in the lives of patients everywhere. Zymeworks has developed some of the most innovative bispecific antibodies and antibody drug conjugates in the industry for the treatment of cancers with high unmet medical needs.

About the Position

Zymeworks is seeking a senior scientist with extensive experience developing protein modeling algorithms and a proven track record of designing algorithms that have impacted the area of computational protein design. The position will report to the Molecular Simulations Group Lead at Zymeworks.

Responsibilities

- Develop and apply protein engineering and design algorithms with minimal supervision
- Develop, validate and document software that implements protein simulation and optimization methods
- Work closely with the software engineering team to meet software quality requirements
- Collaborate with protein engineering and therapeutic development teams to effectively apply protein engineering and analysis software for lead optimization
- Peer-review and mentor junior members in the team
- Participate in the preparation of patents and publications

Required Qualifications

- A Ph.D. in Physics, Chemistry, Applied Math, Computer Science or a related field
- A minimum of three years of industrial or relevant post-doctoral experience developing and implementing molecular modeling algorithms. Industrial experience is strongly preferred. Areas of interest include, but are not limited to: Molecular dynamics/Monte Carlo simulations, Force field/potential development, Protein structure optimization, Free Energy Simulations, Antibody modeling
- Demonstrated aptitude for developing practical and novel applications of molecular simulations methods for addressing therapeutic protein optimization
- Clearly demonstrated capacity to independently lead development efforts as well as guide activities of others
- Proficient in Python, or other programming languages (C/C++, Fortran)
- Fluent in written and spoken English

Desirable Qualifications

- Experience optimizing numerically intensive code
- Protein bioinformatics experience, including but not limited to: Prediction of protein properties from sequence data, Extraction of residue co-evolution data from sequence data, Binding target prediction/identification from sequence data
- Experience implementing and applying machine learning methods to protein modeling

problems. Methods of interest include, but are not limited to: clustering methods and other unsupervised learning techniques (ie SOMs, kernel PCA, ICA), regression methods (ie random forest regression, Gaussian process regression), classification methods (ie random forests, SVMs, logistic regression)

Why Work for Us?

Zymeworks' employees are passionate, engaged and extremely motivated to succeed. Our environment is progressive, collaborative, focused and pragmatic. To learn more about Zymeworks Inc. and our current openings, please visit our website at **www.zymeworks.com**.

Compensation is on par with industry standards and commensurate with experience and includes an extended benefits plan and participation in the employee stock-option plan.

How to Apply

If you are interested in applying for this position, please do so through our online jobs board at **https://zymeworks.mytribehr.com/careers/view/28**. Alternatively, you may email your resume and cover letter including available start date in PDF format to **zymeworks-job28@mytribehr.com**. Although we appreciate all applications, due to the high volume of responses only those selected for interviews will be contacted.