Job Code #:   23INF-3SSML
Status: Exempt, Full Time
Reports to: VP Genetics and Bioinformatics
Department: Informatics
Contact: careers@actiobio.com

About Us!

Actio Biosciences, Inc., is a drug discovery and development company grounded in the science of precision medicine. Actio is developing a portfolio of drugs to modulate the activity of proteins responsible for rare diseases with the goal to also translate these findings into treatments for common diseases with shared underlying biology. Actio has built an integrated discovery engine with deep human genetics, bioinformatics, and drug discovery expertise. Actio was founded in October 2021, and is funded by EcoR1, Droia, and Deerfield Management.

Join the experience of the early stages of innovation and tremendous growth opportunities from learning and working in biotech while contributing to groundbreaking scientific progress that can improve the lives of people living with disease worldwide and for generations to come.   At Actio, our employees are passionate about our work and believe in the power of teamwork, collaboration, and mutual respect for every individual, every perspective, every day.

About You!

Actio Biosciences has an opening for a motivated and experienced Bioinformatics Senior Scientist, Machine Learning to support the discovery of drug targets for the treatment of rare and common diseases. The successful applicant will have a strong background in the development of machine learning models, especially with limited training data like clinical trial data, and the knowledge and creativity to contribute to both feature selection / engineering and model development. You will be focused on machine-learning based identification of drug targets and prediction of clinical trial success. You will collaborate with statistical geneticists, systems biology, and machine-learning experts to make rapid progress in a dynamic company environment.

You will be responsible for:

- Designing, planning, executing, and interpreting the development of machine-learning models for identification of drug target and prediction of clinical trial success
- Developing and maintaining local and cloud-based computational infrastructure to support analytical needs
- Working efficiently with very large datasets, including (but not limited to) genomic data, electronic health records, clinical trial data, and nation-scale biobank datasets
- Independently developing a reusable framework for ongoing machine-learning analyses
- Working closely with other bioinformatics team members, especially systems biology and biomedical informatics colleagues
- Communicating data to multidisciplinary teams verbally and through written documentation
- Preparing technical reports
- Contributing to a work environment that fosters support, collaboration, professionalism, mutual respect, and focus on unmet patient needs.

You have the following skills and qualifications:
- Ph.D. in computer science, bioinformatics, data science, or related field with a minimum of 4 years of experience
- Equivalent work experience with Master's degree will be considered
- Strong knowledge of and experience with Python programming
- Strong knowledge of and experience with python packages for machine and deep learning, like tensorflow, scikit learn, or equivalent
- Experience with Shapely-based feature selection, XGBoost model development, and Optuna hyperparameter optimization or equivalent is preferred
- Experience with network-analysis and graph-based models is preferred
- Experience working with GPU resources in a cloud environment is preferred
- Experience with architecture and tools for managing large datasets is preferred
- Experience developing scalable system architectures that adhere to good software engineering principles is preferred
- Ability to tackle large, open-ended research questions independently and as part of a team.
- Ability to effectively prioritize workload and multi-task
- Excellent communication, analytical and organizational skills, both written and verbal
- Ability to clearly convey methods and results to provide information to engage in collaborative improvement of analytical approaches with leadership and the informatics team

Why Actio?

The work culture at Actio fully embraces teamwork, collaboration and mutual respect. We believe that our employees are our greatest asset and we strive to create an inclusive and empowering environment where everyone feels valued and respected for who they are. We encourage our employees to bring their unique perspectives and experiences to the table and we believe that this diversity is what makes us stronger as a team. We invest in supporting our employees to succeed both at work and at home, and we believe that a good work-life balance is essential for everyone's well-being. If you thrive in an environment where you are inspired by others and empowered to participate to your fullest potential alongside highly talented and kind human beings - - -Actio is the place for you!

We are committed to ensuring all employees, both current and future, receive fair and equitable pay. Base pay is one component of the total compensation package, and is determined within a range according to role, level, and location. This provides the opportunity for growth as you gain experience and develop within a role, while also allowing for differentiation based on performance. The base pay range for this role is between **$133,500 and $155,000** and reflects our good faith estimate of the minimum and maximum target for the position as of the date of posting and may be modified in the future. The final base pay within the range will be determined by work location and additional factors, including job-related skills, experience, relevant education or training, and market demand for your expertise.

Benefits programs offered include:
- Medical, dental and vision insurance (employee premiums covered by Actio at 90-100%)
- Health Savings Account with a rich employer contribution
- Mental health and wellness benefits
- 401k plan participation
- Equity Incentive Plan participation (stock options)
- Life/AD&D Insurance (premiums covered by Actio at 100%)
- Weeklong winter holiday shutdown
- Generous paid time off and holiday policies
- Parental, caregiving and various leaves programs

- Flexible and dynamic work environment where unique strengths of employees at all levels are cultivated
- Regular company events and opportunities to participate in team-building gatherings and activities designed to foster open communication and engagement

Details of participation in these benefit plans will be provided with an employment offer. Actio benefits and compensation programs are subject to eligibility requirements and other terms of the applicable plan or program.

Actio is committed to building a diverse workforce and providing equal employment opportunities to all employees and applicants for employment. We prohibit discrimination and harassment of any kind based on race, color, sex, religion, sexual orientation, national origin, disability, genetic information, pregnancy, or any other protected characteristic as outlined by federal, state, or local laws.

The above is intended to describe the general content of, and requirements to perform this job. It is not to be construed as an exhaustive statement of duties, responsibilities, or requirements.

To apply, please send your CV/resume and cover letter to: careers@actiobio.com, and reference **Job Code #: 23INF-3SSML** in the subject field of your email.