

## Postdoctoral Scientist - Bioinformatics

We are looking for Postdoctoral Scientists with a desire to pursue a career in Bioinformatics / Computational Biology. We are performing cutting edge genomics research by applying the latest high performance computational biology techniques to develop computational approaches and analytical pipelines for extremely large next-generation sequencing data sets. We have opportunities in three areas including:

***Microbial Pathogenesis:*** Our research aims to identify the molecular mechanisms that regulate host/pathogen interactions. We are using next generation sequencing technologies to define the host and bacterial transcriptome, identify key regulatory genes essential for growth and pathogenesis and describe complex networks of interacting genes. We are using novel data sets generated by RNA-Seq, *de novo* genome assembly and insertion sequencing.

***Big Data and Human Genetics:*** Research, development and evaluation of novel high performance computational approaches to manage, analyze, interpret and deliver “Big Data” using tools such as Hadoop and Map-Reduce. We are performing cutting edge genomics research in the area of human genetics, using the latest sequencing technologies combined with high performance computing techniques to identify genetic variants that lead to disease.

This is an exciting opportunity for a recent PhD graduate to gain experience of bioinformatics research in a clinical setting and develop new skill sets from a diverse spectrum of projects. Excellent verbal and written communication skills will be essential as the individual will work collaboratively with biologists and clinicians on projects that lead to publications and presentations at professional meetings.

### ***Minimum Qualifications***

- PhD degree in Bioinformatics, Biostatistics or Computational Biology
- Experience with UNIX/LINUX, including shell scripting
- Proficiency in a scripting language, such as Perl or Python
- Knowledge of core bioinformatics tools and databases
- Deep computational understanding and strong programming skills
- Basic knowledge of statistics, algorithms, data structures and scientific programming

Interested candidates should submit a cover letter, CV, and 3 references to Pat Black [pat.black@nationwidechildrens.org](mailto:pat.black@nationwidechildrens.org). For more information or to apply on line visit: [www.NationwideChildrens.org](http://www.NationwideChildrens.org). Nationwide Children’s Hospital is an equal opportunity employer that values diversity. Candidates of diverse backgrounds are encouraged to apply

Nationwide Children’s Hospital is the fifth largest free-standing children’s hospital in the United States. The Research Institute is housed in a modern 320,000 square foot, dedicated research facility with outstanding shared facilities. The Research Institute’s mission is to enhance the health of children by engaging in high-quality, cutting-edge research according to the highest scientific and ethical standards. The work we do every day is dedicated to improving the health of children and their families in central Ohio and beyond. Faculty members belong to academic departments at The Ohio State University College of Medicine, with whom we enjoy strong and collegial collaborative relationships. In 2011, federal grant awards exceeded \$25 million, ranking The Research Institute among the top ten free-standing children’s hospitals in NIH funding. Nationwide Children’s Hospital is an equal opportunity employer that values diversity. Candidates of diverse backgrounds are encouraged to apply.