



Bioinformatics and Data Science Services Center

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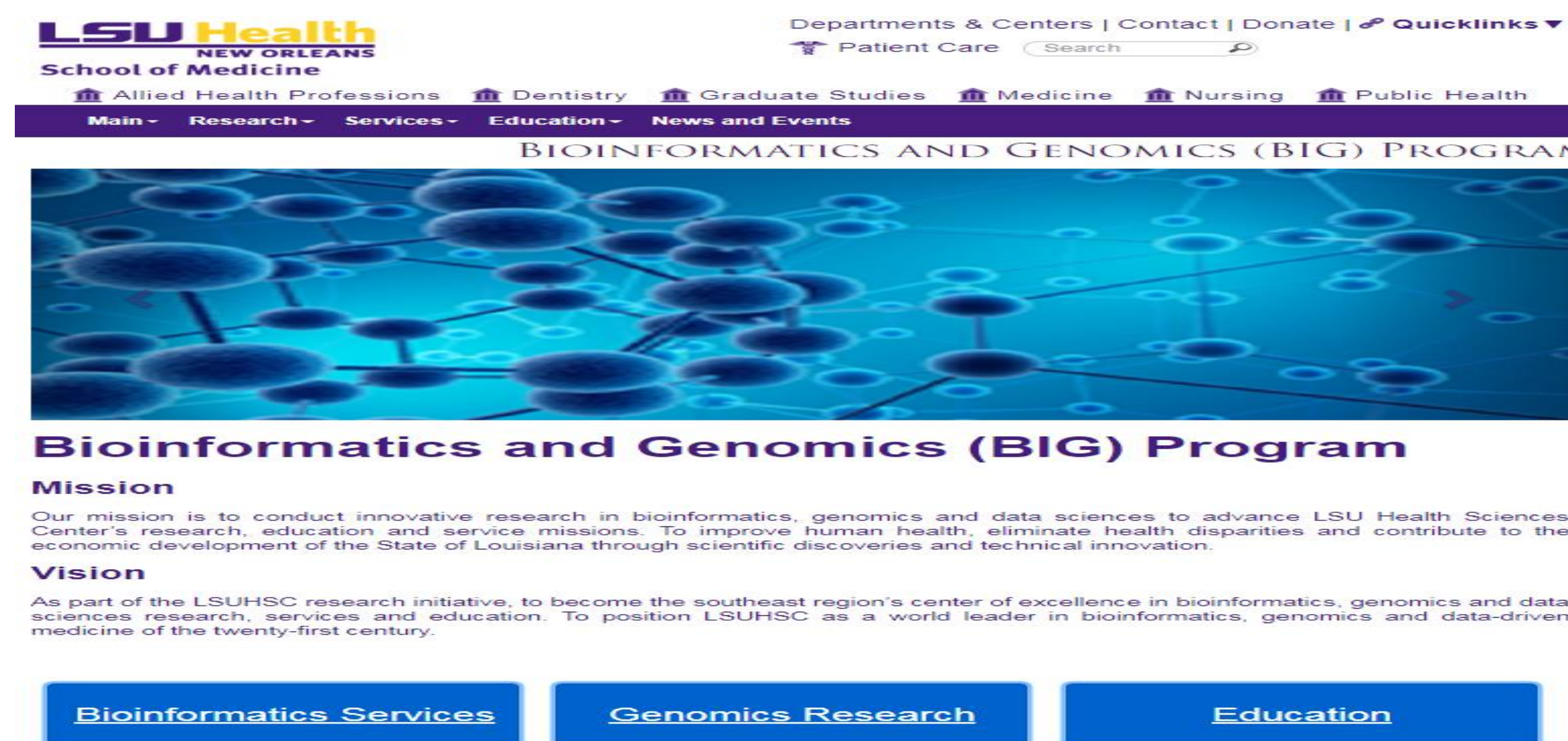


SERVICES PROVIDED

The Bioinformatics and Data Science Service Center provides bioinformatics solutions and services on a COST-RECOVERY or SHARED COST basis to investigators at LSUHSC and CCTS Partner Institutions.

Summary of services

- Bioinformatics and computational genomic analysis of “omics”, genotype, sequence, methylation and other biological data
- Data analytics with application to analysis of big data in a biomedical setting
- Software development and deployment with application to database design and management of large-scale research data
- Education and training seminars on bioinformatics to students, medical professionals and biomedical investigators
- Integration of multiplatform-multiscale biological data with clinical information
- Development and application of novel methods and software tools to emerging biological questions and technologies
- Support in planning and design of grant applications, manuscript and abstracts
- Pathway prediction and modeling gene regulatory networks driving human diseases
- Quantitative modelling and prediction of disease progression and outcomes
- Maintenance of large-scale genomics and other biological databases
- Drug discovery and repositioning



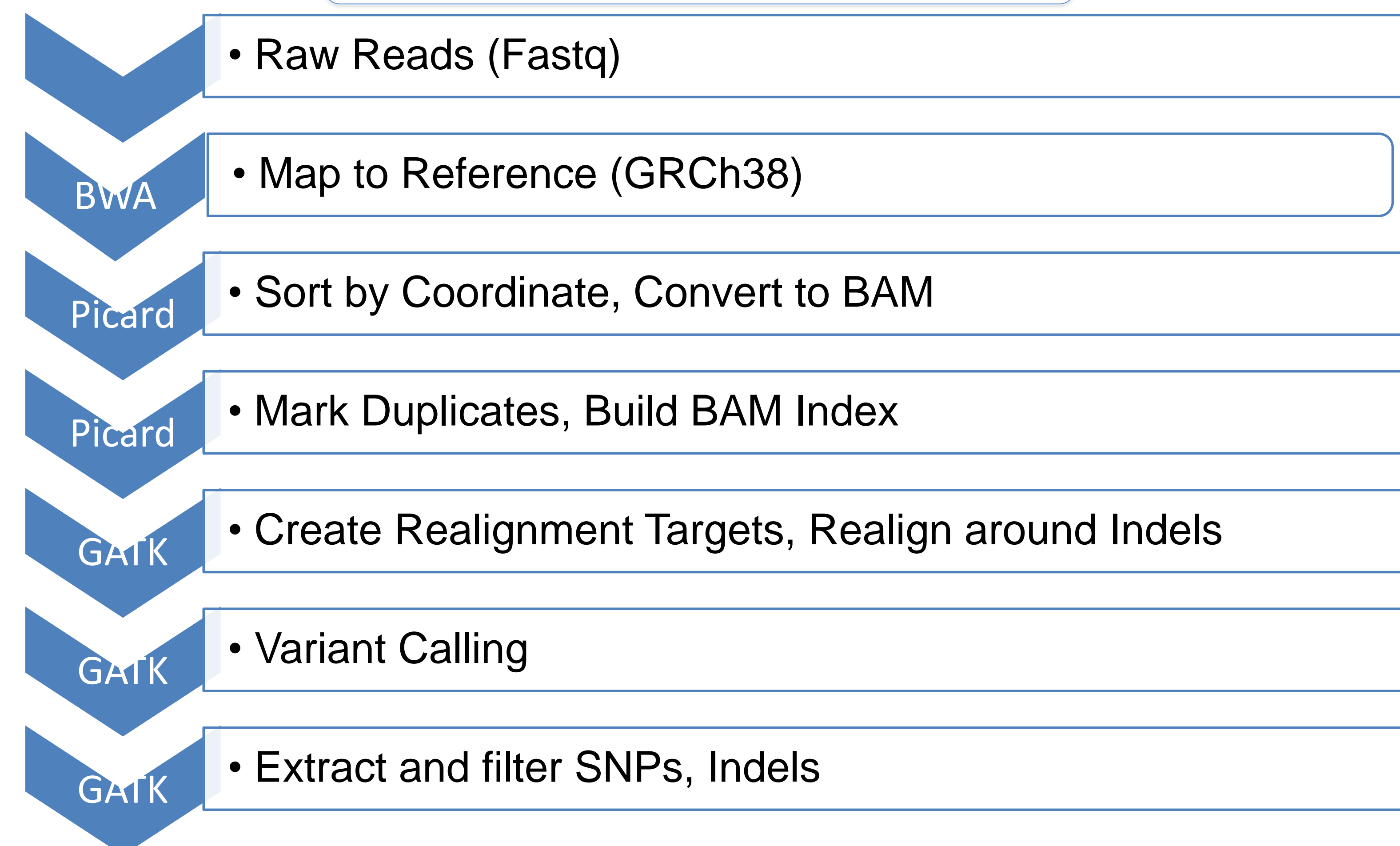
www.medschool.lsuhschool.edu/bioinformatics/



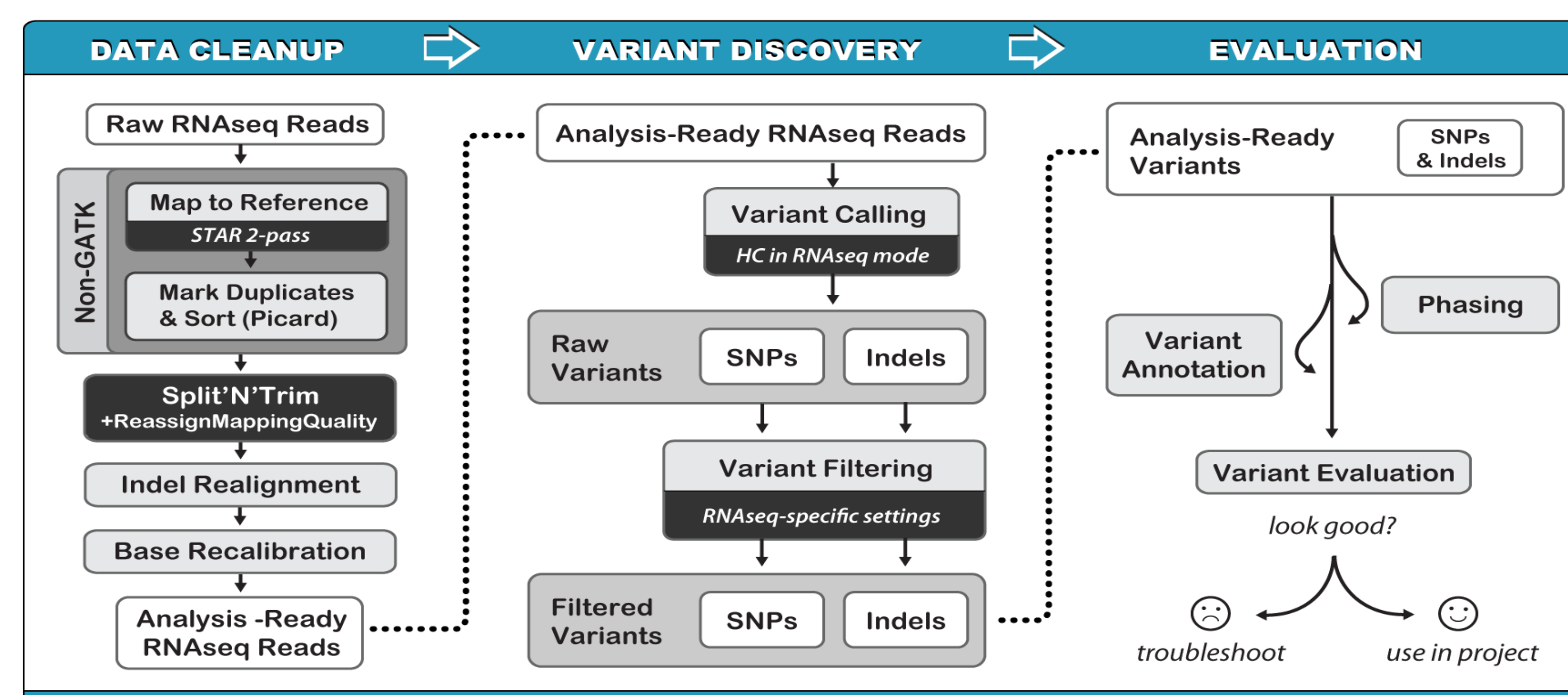
<https://www.cct.lsu.edu/>



WES and WGS pipeline



RNA-seq pipeline



TRAINING

- The Service Center is designed to train and facilitate “the involvement of talented students in research aspects of the fields of bioinformatics, genomics and data sciences, in particular those from disadvantaged background such as underrepresented minorities, or first-generation college students.”
- The Service Center seeks to identify talented postdoctoral fellows and junior faculty from around the Southeast working at Partner Institutions who could benefit from training and spending a summer on the LSUHSC campus working in the bioinformatics and Computational Genomics laboratory to gain experience in Bioinformatics and data science.
- The Service Center provides hands-on training and organizes workshop seminar series in bioinformatics, genomics and data science to faculty, staff and students on data analysis and interpretation using publicly available bioinformatics tools and genomic resources.

FUNDING



1P20GM121288-01 NIH/NIGMS

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