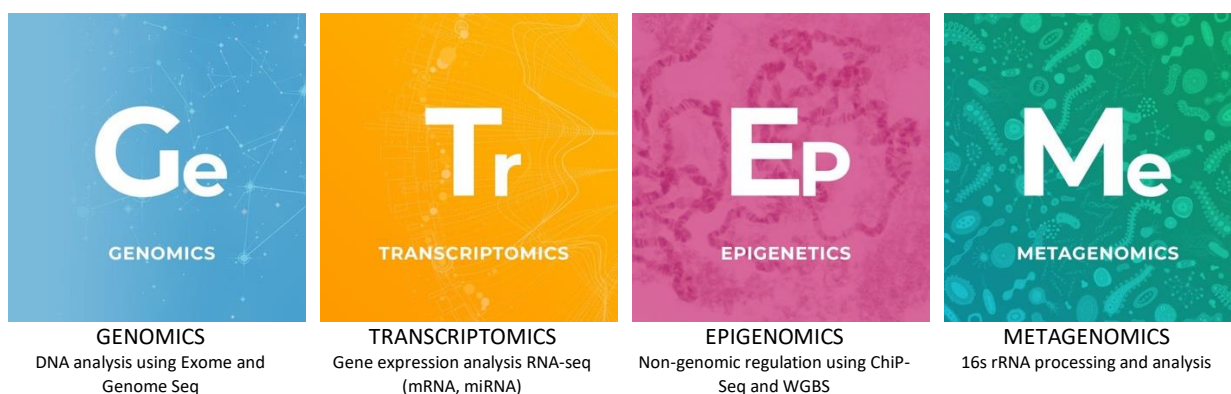# OmicsLOGIC Bioinformatics Training

Learn Bioinformatics with Louisiana Biomedical Research Network in partnership with Pine Biotech and the Tauber Bioinformatics Research Center at University of Haifa, Israel

Omics LOGIC Bioinformatics Training has been designed by LBRN in collaboration with Pine Biotech to give students access to basic introductory to advanced analytical bioinformatics courses. The training will be made available through our online platform for students interested in learning about Big Data Bioinformatics. The training is modeled after undergraduate and graduate course topics at LSU, Georgetown University Medical Center and other universities and was designed by faculty and researchers at the Tauber Bioinformatics Research Center.

GENOMICS	TRANSCRIPTOMICS	EPIGENOMICS	METAGENOMICS
DNA analysis using Exome and Genome Seq	Gene expression analysis RNA-seq (mRNA, miRNA)	Non-genomic regulation using ChiP-Seq and WGBS	16s rRNA processing and analysis

This online training is your opportunity to master BIOINFORMATICS as a supplement to other coursework and receive a certificate from the Louisiana Biomedical Research Network (LBRN). Bioinformatics is a discipline that combines *Mathematics, Computer Science and Biology*.

By applying for this program, you will gain access to OMICS LOGIC resources on a monthly subscription which provides access to 12 online courses that cover various domains of Big Data Bioinformatics. The same license also enables participants to access the AI guided and user-friendly T-BioInfo platform for hands-on analytical experience and practice.

Many of the courses are introductory and are suited for undergraduate students that are interested to learn about the impact of Big Data and High-throughput Experiments across Life Science Domains, including Biomedical Research, Biotechnology and Agro-biological Studies. The coursework will be effective for students pursuing undergraduate life sciences degrees and pre-medical students.

Learn more and register on this link: https://edu.tbioinfo.com/lbrn-2020-1

CLOSE THE GAP FOR RESEARCH & DISCOVERY

Education Platform
- biology concepts
- data science skills
- project-based curriculum
- creativity and problem solving

SKILLS

TOOLS

✓

APPLICATIONS
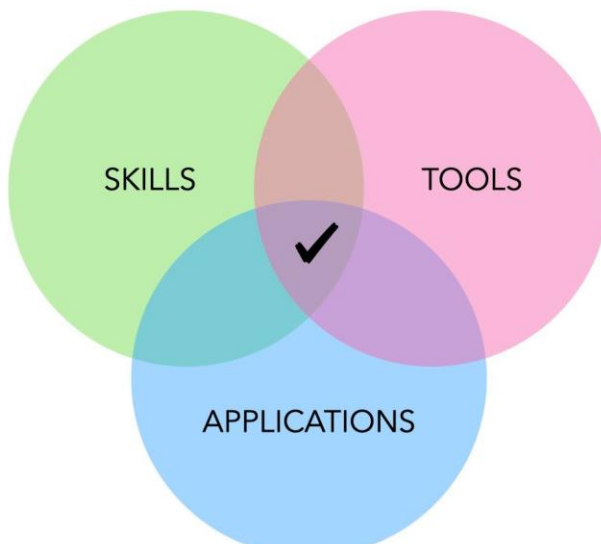
Research Toolkit
- data processing
- machine learning
- integration
- annotation
- visualization

The world of big data is constantly changing as technologies to generate new data open new perspectives for molecular precision and detail in life sciences. This exponential growth in knowledge is accompanied with the need for scientist from all backgrounds to find ways to integrate these concepts to their own research studies and allow them to identify new, meaningful information with either new or old data. This training and associated research resources help students and scientist of all backgrounds to leverage big OMICS data in an efficient way. Many students have applied the learned skills to develop independent research projects after completing this training.
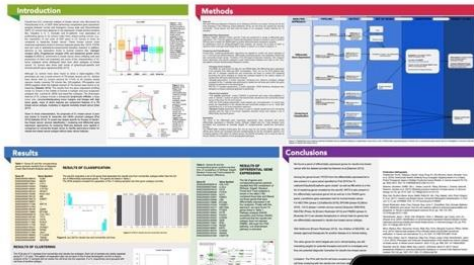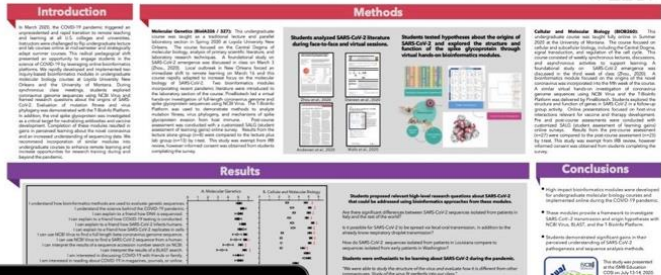
Every training module contains detailed step-by-step explanations about the biomedical problems and data analysis concepts which can be applied various domains of biomedical discovery. Complicated concepts are thoroughly explained with interactive illustrations. The courses introduce bi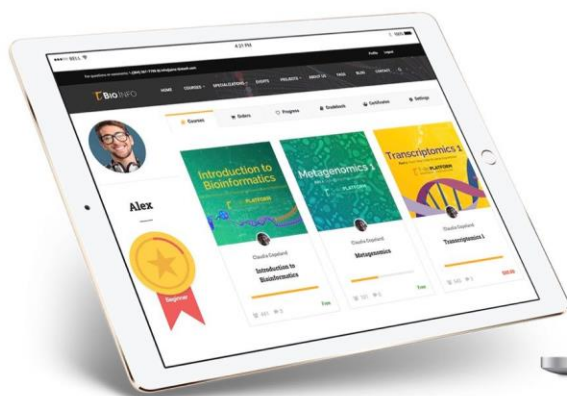ostatistical concepts and explain the need for machine learning in life sciences. By completing the coursework, you will learn to apply advanced machine learning methods to big datasets, understand data structures and use analytical methods effectively to extract insights from large datasets.

COMPREHENSIVE PLATFORM FOR

BIOINFORMATICS TRAINING
edu.t-bio.info
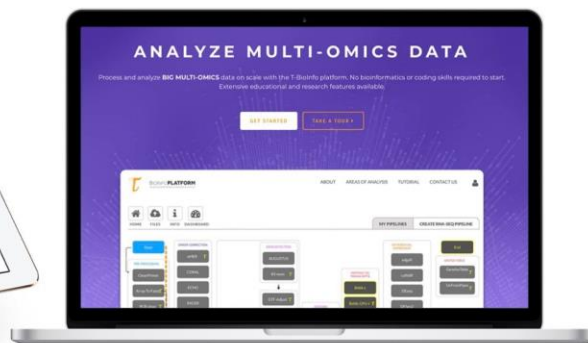
BIG DATA ANALYSIS
server.t-bio.info

Previously, this training has helped both undergraduate, graduate, and post-graduate students learn about bioinformatics methods and develop independent studies leveraging analytical tools.

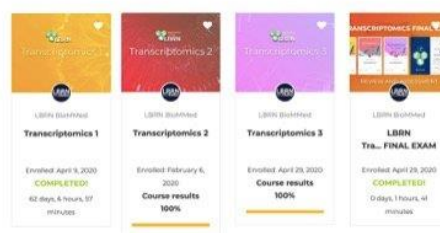ONLINE BIOINFORMATICS TRAINING - OMICSLOGIC BY PINE BIOTECH

12560
Expert

"I have increased my knowledge substantially throughout this course. The software has created a great opportunity for me to practice what I've learned and could be very useful for my career development. Thank you for the wonderful instruction!

Thao Vo
Ph.D. Student, Louisiana State University

OMICS LOGIC   LBRN BIOMMED   T-BioPLATFORM BIOINFORMATICS DISCOVERY

Coursework Completed

Transcriptomics 1

Transcriptomics 2

Transcriptomics 3

TRANSCRIPTOMICS FINAL EXAM

LBRN BioMMed
Transcriptomics 1
Enrolled April 9, 2020
COMPLETED!
62 days, 6 hours, 07 minutes

LBRN BioMMed
Transcriptomics 2
Enrolled February 6, 2020
Course results
100%

LBRN BioMMed
Transcriptomics 3
Enrolled April 29, 2020
Course results
100%

LBRN Tra... FINAL EXAM
Enrolled April 29, 2020
COMPLETED!
0 days, 1 hours, 41 minutes

LBRN Transcriptomics

January - April 2020

Students from campuses from all over Louisiana have had the chance to study infectious diseases, cancer and microbiology.

I enjoyed trying new forms of analysis, T-Bio was new to me, and I thought it was fun.

Tyler Hayes

Senior Undergraduate at the Southern University and A&M College, Baton Rouge

Knowing about organisms in the genetic level was fun. Also I really enjoined drawing the pipelines and evaluating the results.

Prasansha Paudel

Student at University of Louisiana, Monroe

I enjoyed the informative chat sessions and webinars.

Erakwandra Joseph

Senior Biology Pre-Health/ Dental Major at Grambling State University

The program will be offered online on a flexible schedule. Using our tracking system, the activity will be monitored to help address technical challenges and provide certification approved by LBRN committee on bioinformatics education. For additional question, and inquiries about participation, please fill out the form on this link: https://edu.tbioinfo.com/lbrn-2020-1

Certificate
OF COMPLETION

Omics LOGIC Bioinformatics Training
Online Training in Bioinformatics

This certificate is presented to

John Smith

Training in Bioinformatics
LBRN

April 02, 2021

DATE

Program Manager