INSTRUCTORS INFORMATION

Dr. Voke Toye is the Founder and CEO of Biologix Support Services Ltd. She has over 12 years of hands-on experience in molecular biology research techniques. In 2006, she pioneered pipette management services in molecular laboratories across Nigeria. She initiated collaboration between the Global Health Workshops Group, Cummings School of Medicine, University of Calgary and the Department Cell Biology and Genetics, University of Lagos, Nigeria (https://www.ucalgary.ca/workshops/news). Voke successfully organized three intensive hands-on molecular biology workshops in "DNA BASICS" and Bioinformatics at the University of Lagos. Her research interests focuses on modulating the genotoxicity of hydroxyurea used in sickle cell anemia (SCA) management and molecular methods for diagnosing SCA.

Dr. Toye received her PhD in Molecular Biology from the University of Lagos, Masters in Biomedical Technology (MBT) from the University of Calgary, Alberta Canada and a BSc in Biology from the University of Lagos. She is also a Lagos Business School (LBS) Alumni, and was among the recipients of the 100 Leaders of Tomorrow Award in Biotechnology at the GapSummit Conference University of Cambridge UK, 2016 http://globalbiotechrevolution.com/2016/06/05/thabi-

Dr. Tawakalt Fagbayi is currently a lecturer at the Department of Cell Biology and Genetics, University of Lagos. She has over 8 years hands-on experience in molecular biology research. She has been a co-facilitator/trainer of "DNA BASICS" and "MOLECULAR WORK-SHOPS" at the Department of Cell Biology & Genetics, since its inception at University of Lagos alongside Dr. Voke Toye.

Dr. Tawakalt's research focuses on individuals with autism spectrum disorders in Lagos Metropolis.

She is committed to research support and mentorship using genetic approaches. Dr. Tawakalt received both her Bachelor's and Master's degree in Cell Biology & Genetics and her Doctoral degree in Cell & Molecular Biology from the University of Lagos. She is the recipient of several local and international awards and has had numerous trainings in molecular genetics, molecular biology computational neuroscience, neurogenetics and forensic biology. She has also attended both local and international conferences.

Biologix Support Services Ltd. 56C, Olorunlogbon Street, Anthony Village, Maryland, Lagos

About Biologix

Biologix Support Services Ltd (RC: 673500) is an indigenous biotechnology company positioned to provide world-class support services to the emerging bioscience and biotechnology industry — food and beverage, medical diagnostics, pharmaceutic, agriculture, environment as well as universities, research institutions, major hospitals and other related institutions in Nigeria. At Biologix, the development of Nigeria's bio-economy is one of our key objectives and one vital step in achieving this is through focused training at all levels; Biologix recognizes the urgent need to fill the skill gap in Nigerian graduates and build the capacity of our local human resource through hands-on training on molecular biology techniques. The outcome will be innovations that will gradually reduce our reliance and dependence on foreign expertise in the bioscience field and local production of essential biologicals used in manufacturing of food, drugs, disease diagnosis and life science research. As a pioneer in quality life sciences services, we offer training for high schoolers, researchers, professionals in life science industries such as, pharmaceutical, medical diagnostics and biotech.

HOW TO REGISTER

Kindly send an email to

info@biologix.com.ng

to enquire about space availability and payment instructions

For updates on training and other services at Biologix



http://www.biologix.com.ng





Training

Building in Molecular Biology — DNA Basics

and

Capacity

and Bioinformatics

March 26th — 30th, 2018
Anthony Village, Lagos

COURSE DESCRIPTION

Molecular biology is the study of life at the molecular level. It deals with interactions between the sundry systems of the cell such as the interactions between DNA, RNA and protein synthesis as well as their regulations. Bioinformatics deals with the storage, and retrieval of biological data from databases with the aim of extracting insightful information from them. Knowledge of molecular biology techniques is applicable in a bevy of fields— medicine, drug design and manufacture, biotechnology, diagnostics, personalized medicine, forensic science etc.

The course will provide knowledge and skills in molecular biology techniques and bioinformatic analysis; the format of the training includes lectures, bench work, and computer labs with exercises and hand in assignment.

At the end of the course, participants would be conversant with molecular biology terminology, know the different techniques and their applications in molecular and bioinformatic analyses of biological systems.

WHO SHOULD ATTEND

This is a five-day course for those interested in up-skilling with respect to molecular biology techniques and bioinformatics. Thus, the course is intended for personnel in life sciences with some scientific background. This informative, hands-on course is suitable for persons involved with or participating in molecular-biology related and biotechnology research, supervision, scale-up or manufacturing, technical operations or basic/applied research.

LEARNING OBJECTIVES

At the completion of this course, you would have gained:

- An understanding of the different techniques in molecular biology.
- The knowledge of the principles and applications of the molecular and biotechnological tools, and different software employed in bioinformatic analysis.
- The understanding of how to interpret genomic-related results.
- The facility to communicate effectively with your colleagues in other areas of molecular biology.
- Technical-know-how needed to run molecular biology equipment.

HOTEL INFORMATION

- Banex Hotel & Suites, 60 Olorunlogbon Street, Anthony Village, Maryland, Lagos
- Diamond Hotel, 5, Okunfolami Street, Anthony Village, Lagos

COURSE MODULE I: DNA Basics

Theory: Overview of Molecular biology; Structures & Functions of Nucleic Acid (DNA & RNA); Principles of PCR; PCR Optimization; PCR Technologies; Principles of Sequencing; Non-PCR Amplification Techniques; Troubleshooting Techniques



Hands-on: Pipetting skills; Lab math and buffer preparation; Genomic DNA Isolation/plasmid purification; polymerase chain reaction (PCR-based techniques); Agarose gel electrophoresis

What you will learn from this module

By the end of this module, you should be able to:

Describe the organization, structures and functions of nucleic acids.

Describe the principle underlying molecular biology techniques.

Plan, set-up and conduct experiments using molecular biology techniques.

Troubleshoot when experiment runs into trouble.

Comfortably use the micropipette, and understand the chemistry of buffers and its preparation.

COURSE MODULE II: Bioinformatics



Theory: Introduction to Bioinformatics; DNA/Protein Sequences and Annotations; Basic Local Alignment Searches (e.g. BlastP); Multiple Sequence Alignments; Homology Searches & Phylogenetics

Hands-on: Retrieving DNA/RNA/protein sequences; Restriction Analysis; Primer Design; Making sense of DNA/protein sequences; Homology Searches; Phylogenetics

What you will learn from this module

At the end of this module, participants would understand how to:

Retrieve and analyze DNA and protein sequences.

Design primers and obtain restriction maps.

Perform homology search and multiple alignment of DNA and protein sequences.

Interpret result, deploy computational skills, and identify the pros and cons of bioinformatic tools.

PAYMENT

- ♦ N 110,000 PER PERSON
- ♦ INCLUDES TEA BREAK AND LUNCH

EARLY BIRD DISCOUNT

If you register by the end of February you will receive a \$ 10, 000 discount on the course.

GROUP DISCOUNT

₦ 500, 000 for a group of five (5) participants.