DNA LEARNING CENTER NIGERIA

Empowering Future Scientists

5 Years of Transforming Science Education

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Welcome Messages

From the desk of the Director, DNALC Nigeria

It is with great pleasure that I welcome you all as we share the joy of reaching this beautiful milestone. From our humble beginnings, we have grown into a beacon of scientific inquiry and hands-on learning. As we reflect on our journey, I am reminded of the countless moments that have defined our progress—moments of discovery, of challenge, and of triumph.

Our mission is simple yet profound: to equip the next generation of scientists with the tools they need to address the pressing challenges of our time. Whether in agriculture, medicine, or environmental science, the work we do here at DNALC Nigeria is paving the way for a brighter, more sustainable future. I am proud of the strides we have made and excited for the path that lies ahead. Thank you for being part of our story.

Prof. George Ude
Director,
DNALC Nigeria

Message from the Vice Chancellor, GOUNI

Dear friends and colleagues, I welcome you all to a DNA Learning Center Nigeria, where the seeds of knowledge are sown, nurtured, and grown into the fruits of innovation. The DNALC Nigeria has become an integral part of our academic community, symbolizing our commitment to excellence in scientific education. As we celebrate the milestones achieved, we also look forward to the many more that lie ahead. This center will always hold a special place in my heart as I had witnessed its birth and watched it grow.

Our collaboration with DNALC has not only enriched the academic experience at Godfrey Okoye University but has also positioned us as leaders in bioscience education in Nigeria and beyond. The vision that started as a shared dream has now become a reality, and I am proud of what we have accomplished together. We shall continue to push the boundaries of knowledge and innovation, for the benefit of this generation and those to come.

Rev. Fr. Prof. Christian Anieke
Vice Chancellor,
GOUNI

From the Executive Director, DNALC NY

Greetings from the DNA Learning Center in New York! It is with great pride that I extend my warmest welcome to all who are part of the DNALC Nigeria community. When we first envisioned the expansion of our educational mission to Nigeria, we knew it would be a bold step. Today, seeing the remarkable progress and impact of DNALC Nigeria, I am convinced that this partnership has exceeded our highest expectations.

The work being done here is not just about teaching science; it is about inspiring a generation to think critically, to ask the right questions, and to seek solutions that will make a difference. As we continue to grow and evolve, our shared commitment to excellence remains resolute!
Thank you for trusting the process.

Dr. Dave Micklos
Executive Director,
DNALC NY

From the Deputy Director & Administrator

Welcome to DNALC Nigeria, a center of excellence where passion meets purpose. Our journey has been one of growth and learning, guided by a vision to make hands-on science education accessible to all. As we reflect on the past, we also set our sights on the future, determined to continue our mission with even greater resolve.

I am honored to be part of this great innovation and to witness the impact DNALC is making. We are not just teaching science; we are inspiring a generation to change the world! I cannot thank you enough for your support and for being part of our community.

Michael Okoro
Deputy Director,
DNALC Nigeria

DNALC Nigeria So Far

DNALC Nigeria So Far





MILESTONES IN 5 YEARS

2011 — Laying of groundwork for what would turn out to be the first DNALC in Nigeria & Africa

2019 — DNALC Nigeria officially opened its doors

2024 — DNALC sets to launch its Science City Project, first of its kind in Africa and beyond

These milestones are more than just achievements; we like to think of them as building blocks of a legacy that will continue to shape the future of science education in Nigeria. Through consistency, hard work, and collaboration, DNALC Nigeria has established itself as a leader in the field, and we are excited to continue this journey in the years to come.

When we started, there was no suitable structure—no fans, no AC, just a few resilient minds determined to build something out of nothing. It was our passion and commitment that laid the foundation. Today, that determination has brought us to where we are, with a thriving center that stands as a testament to what we've achieved together.

DNALC Nigeria began with a modest vision to transform science education in Nigeria. Now, that vision has grown into reality, with modern facilities, expanded programs, and a vibrant community of learners and researchers. The progress is clear—showing just how far we've come and the exciting future ahead.

THE BIG 5:

A journey of resilience and determination

Five years ago, DNALC Nigeria set out to transform science education, and today, we've surpassed every expectation. From pioneering research to empowering future scientists, we've made our mark. These five years represent not just our journey, but a bold step forward for science in Nigeria.

What started out as a dream has now become a household name. DNALC Nigeria began with a simple vision: to ignite a passion for science in the hearts of students across the nation. Today, that vision has blossomed into a thriving community of learners, educators, and researchers, all united by a shared commitment to foster scientific inquiry. From classrooms to laboratories, our name is now synonymous with excellence, innovation, and the relentless pursuit of knowledge. The dream lives on, growing stronger with each discovery, each breakthrough, and each new generation we inspire

Our Vision and Mission

At the DNA Learning Center Nigeria, our vision is clear: to be a reference point of excellence in scientific training, capacity building, and research. We are committed to shaping the next generation of scientists who will address the challenges of our time—whether in medicine, agriculture, or environmental conservation.

Our mission is to provide students, instructors, families, and the public with hands-on laboratory training and inquiry-based instruction that equips them to thrive in the gene age. By fostering a culture of curiosity and critical thinking, we aim to build a skilled workforce capable of driving innovation and progress across Nigeria and Africa at large.

Who we are

The DNA Learning Center Nigeria (DNALC Nigeria) is a leading institution dedicated to advancing science education through hands-on molecular biology training and research.

In partnership with global and local institutions, DNALC Nigeria empowers students and professionals with the skills needed to thrive in the gene age, driving innovation and excellence in bioscience education across Africa. We strive to create a welcoming and inclusive environment where all students can thrive.

> **They have everything we have at the DNA Learning Center.**
>
> David Micklos,
> DNA Learning Center founder and Executive Director.

Our Core Focus

- Innovative Science Education & Curriculum Design
- Hands-On Learning
- Global Partnerships
- Cutting-Edge Research
- Empowering Future Scientists

We believe that knowledge is the key to a world brimming with possibilities. Our goal is to unlock the frontiers of science, opening doors to discovery and innovation for all who dare to dream. Here, every experiment is a step closer to understanding, and every student holds the potential to change the world.

Founding Story: How it all began

The story of DNALC Nigeria is one of vision, collaboration, and determination. It all began with the realization that Nigeria's future in science and technology hinged on the quality of education provided to its young minds. In 1988, Dr. David Micklos founded the DNA Learning Center in New York, setting the stage for a global initiative that would eventually reach the shores of Nigeria.

The idea of bringing this innovative educational model to Nigeria was born from a collaboration between three institutions: the DNA Learning Center at Cold Spring Harbor Laboratory, Bowie State University, and Godfrey Okoye University. These partners recognized the need for a dedicated molecular biology instruction center in Nigeria—one that would provide students with hands-on experience and ignite their passion for science.

In 2011, the groundwork was laid, and by 2019, DNALC Nigeria officially opened its doors. From its modest beginnings at Godfrey Okoye University, the center has grown into a beacon of excellence, attracting students, educators, and researchers from across the country. Today, DNALC Nigeria stands as a testament to what can be achieved through shared vision and firm commitment.

> We've arranged a civilization in which most crucial elements profoundly depend on science and technology.
>
> Carl Sagan

A quick look at some of the key moments, people, and events that have defined our growth and success.

Milestones in Five Years: Key Achievements

Over the past five years, DNALC Nigeria has achieved remarkable milestones, each representing a step forward in our journey of growth and impact. Some of the key highlights include:

2019: DNALC Nigeria officially launched, marking the beginning of a new era in scientific education in Nigeria.

2020: The center received its license from Cold Spring Harbor Laboratory, establishing DNALC Nigeria as the first of its kind in Africa.

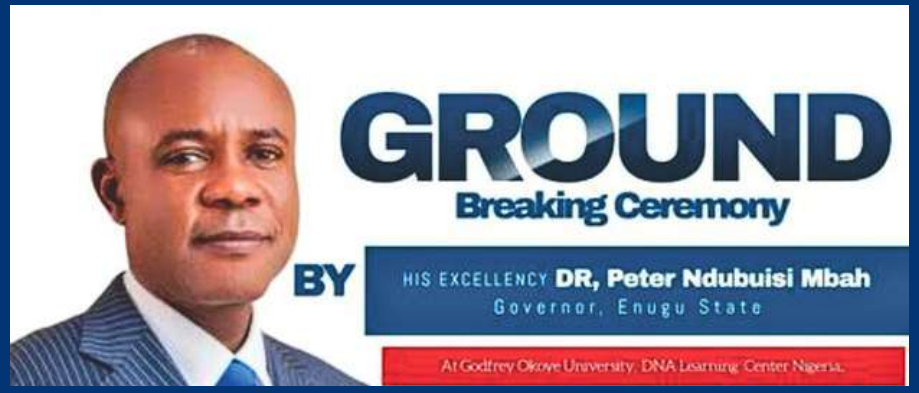
2021: The center introduced the Undergraduate Research Experience (UREx), providing students from across Nigeria with the opportunity to engage in cutting-edge research alongside seasoned scientists. This program has since become a cornerstone of our educational offerings.

2022: DNALC Nigeria expanded its outreach efforts, partnering with local schools and universities to bring hands-on laboratory experiences to a wider audience. The success of these initiatives led to increased enrollment in our summer camps and workshops.

2023: The introduction of the Course-Based Undergraduate Research Experience (CURE) marked another major milestone. This program integrated research into the undergraduate curriculum, allowing students to gain real-world experience and contribute to ongoing scientific studies.

2024: As we look to the future, the groundbreaking ceremony of the new Science City will mark our most ambitious project yet. This state-of-the-art facility will further our mission by providing advanced research and training opportunities for the next generation of African scientists.

> I think one of life's greatest milestones is when a person can look back and be almost as thankful for the setbacks as for the victories.
>
> Bob Dole



Key Projects and Initiatives

Disruptive Pedagogy in the Biological Sciences

At DNALC Nigeria, we believe that the way science is taught should be as dynamic and evolving as the field itself. Traditional methods of teaching, often reliant on rote memorization and theoretical instruction, have left a gap in practical understanding and critical thinking among students. To bridge this gap, we have introduced disruptive pedagogical approaches that prioritize hands-on learning and inquiry-based instruction.

Our approach challenges students to engage deeply with the material, ask questions, and explore the unknown. By moving away from traditional didactic teaching methods, we have created an environment where students not only learn science but also practice it. This shift has led to a more meaningful and lasting understanding of biological sciences, equipping students with the skills they need to innovate and solve real-world problems.

Taking the Vision Across the Continent

The impact of DNALC Nigeria has extended far beyond the borders of Nigeria, reaching across the African continent. Recognizing the shared challenges in science education throughout Africa, we have taken proactive steps to export our successful model to other regions.

Through partnerships with educational institutions, government bodies, and international organizations, DNALC Nigeria is working to replicate its success and contribute to a broader transformation in science education across Africa.

Our goal is to create a network of centers that embody the same commitment to excellence and innovation, ensuring that students across the continent have access to the high-quality, hands-on scientific training they deserve.

Innovative Curriculum Integration Plans: CURE & UREx

The success of CURE and UREx has not only benefited our students but has also positioned DNALC Nigeria as a leader in innovative educational practices..

Two of our most significant contributions to science education in Nigeria are the Course-Based Undergraduate Research Experience (CURE) and the Undergraduate Research Experience (UREx) programs. These initiatives represent a paradigm shift in how research is integrated into the undergraduate curriculum.

CURE: This program embeds research into the undergraduate experience, allowing students to engage in authentic scientific research as part of their coursework. By working on real-world research projects, students gain hands-on experience that not only enhances their understanding of biological sciences but also prepares them for future careers in research and academia.

UREX: Established as a collaborative effort with Bowie State University and DNALC New York, the UREx program provides an immersive research experience for undergraduate students. Over a 10-week period, students live and work in a laboratory environment, learning the scientific process from the ground up. This program has been instrumental in fostering a new generation of scientists who are equipped to tackle the challenges of the 21st century.

Making Forensic Sciences Affordable

Forensic science has long been perceived as a specialized and expensive field, often out of reach for many institutions and students in Nigeria. At DNALC Nigeria, we are committed to changing this narrative by making forensic science accessible and affordable. Through strategic partnerships and careful planning, we have developed programs that provide hands-on forensic science training at a fraction of the typical cost.

Our forensic science courses are designed to be both comprehensive and cost-effective, covering everything from DNA fingerprinting to crime scene investigation. Making these courses affordable, we ensure that access to this crucial field is democratized. This will in turn, empower more students and professionals to pursue careers in forensic science. This initiative is part of our broader mission to ensure that no aspiring scientist is left behind due to financial constraints.

EDUCATION & TRAINING PROGRAMS

Our approach to education transcends mere traditional classroom instruction. We've developed a variety of programs aimed at equipping students, educators, and professionals with practical skills that extend beyond theoretical knowledge. Emphasizing on hands-on learning allows our participants to not only understand scientific concepts but also experience the process of firsthand.

Our array of programs, like the DNA World course, Genome Science & Basic Forensics, and specialized training in Metagenomics, etc., cater to a diverse target audience. Each course is carefully designed to bridge the gap between theory and practice, enabling participants to apply their knowledge in real-world scenarios. This practical focus has positioned DNALC Nigeria as a go-to destination for those looking to enhance their expertise in molecular biology and related fields.

Workshops, Conferences, & Seminars

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From available evidence, our value-packed programs have undoubtedly had tangible impact on participants, many of whom have gone on to apply their skills in their careers. These sessions are interactive and practical, providing attendees with the tools they need to navigate the ever-evolving world of science.

Conferences Hosted

Last year, we hosted the maiden edition of the International CURE Conference (ICC), themed "Bridging the Gap: Integrating CURE for Sustainable Education and Innovation." This event stood out as a significant highlight. Organized in collaboration with Godfrey Okoye University and Bowie State University, the conference attracted 170 registrants from Nigeria, the United States, Pakistan, Kenya, and Ethiopia. The diverse participation and engaging discussions underscored the global relevance of CURE in transforming undergraduate education.

International CURE Conference

As we reflect on our successes, we're excited to announce the 2024 CURE Conference, scheduled for November. This year's theme, "Sustainable Research Practices for the Next Generation," will build on the momentum from last year's event, which was a resounding success. We'll be bringing together experts and enthusiasts to explore the future of STEM education and innovation. To secure your spot ahead of time, scan the QR code below: or visit https://dnalcnigeria.org/workshop/application/form/9

Undoubtedly, ICC'23 made a significant impact on the global dialogue surrounding the future of science education. This comes as no surprise, as our conferences are meticulously designed to tackle critical issues in science and education, acting as a bridge that connects educators, researchers, and students from around the world.

Outreach/Collaboration with Other Institutions

One of DNALC Nigeria's core principles is its commitment to outreach and collaboration. We believe that progress in science education is achieved through partnerships that extend beyond our center. This year, we've strengthened our collaborations with schools and universities across Nigeria and beyond, working together to enhance science education

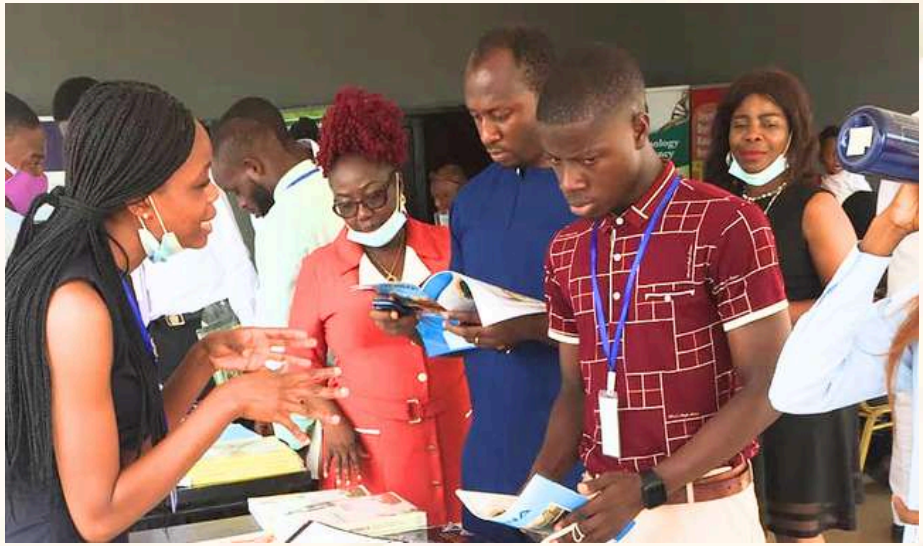
Public Awareness Campaigns and Events

In addition to our educational and outreach efforts, DNALC Nigeria is actively engaged in raising public awareness about the importance of science. Our media team has played a key role in promoting our programs and events on social media, broadening our reach and encouraging greater participation in our initiatives.

Public awareness campaigns are essential to our strategy of making science accessible. By engaging with the community through events, workshops, and social media, we are making science more relatable to the public.

Our outreach programs have included visits to secondary schools, where we introduce students to DNA and molecular biology. These sessions are designed to ignite curiosity and inspire the next generation of scientists. We also collaborate with universities to develop curriculum-based laboratory experiences that meet international standards, ensuring that Nigerian students are prepared for global opportunities..

The partnerships with Bowie State University and Godfrey Okoye University have been particularly impactful. Together, we've developed programs like UREx and CURE that have transformed the undergraduate experience by providing hands-on research opportunities typically reserved for graduate students. These collaborations are largely about building a sustainable future for science education in Nigeria.



Our Partners & Supporters

Government and Regulatory Agencies

DNALC Nigeria's success is deeply rooted in the support and collaboration with various government and regulatory agencies. These partnerships have played a crucial role in ensuring that our programs align with national educational standards and contribute meaningfully to the broader societal goals.

Enugu State Government

The government of Enugu State has been a steadfast partner, supporting our efforts to expand and improve our facilities. Their backing has been particularly vital in the development of the DNALC Nigeria Science City, a project that will significantly enhance our capacity to provide cutting-edge research and training.

The US Consulate

The US Consulate has equally been instrumental in facilitating our international collaborations, particularly with institutions in the United States. Their support has enabled us to bring global perspectives to our programs, enriching the learning experience for our students.

The British Council

Through the British Council, DNALC Nigeria has engaged in several initiatives aimed at enhancing science education in Nigeria. Their commitment to fostering educational exchange has allowed us to connect with UK-based institutions and integrate best practices into our curriculum.

Enugu State Ministry of Health & Ministry of Environment

Our collaboration with these ministries has been essential in advancing research projects related to public health and environmental sustainability. By working together, we have been able to address local challenges through scientific innovation and community engagement.

Post Primary School Board (PPSMB)

The partnership with the Post Primary School Board has facilitated our outreach to secondary schools across the state, helping us to inspire young students and introduce them to the world of molecular biology.

National University Commission (NUC)

The NUC's endorsement of our programs has been instrumental in validating the quality and impact of the education we provide. Their support has helped us gain recognition as a leader in bioscience education in Nigeria.

Nigerian Data Protection Commission (NDPC)

As we expand our organizational scope and research capabilities, the NDPC has provided guidance on data protection regulations, ensuring that our practices meet the highest standards of privacy and security.

Our Partners & Supporters

ACADEMIC INSTITUTION

DNALC Nigeria's academic partnerships are at the heart of our mission to advance science education and research. These collaborations have allowed us to pool resources, share expertise, and create programs that are both innovative and impactful.

Cold Spring Harbour Laboratory / DNALC New York

Through our collaboration with Cold Spring Harbor Laboratory (CSHL), we have integrated cutting-edge research methodologies and advanced training in molecular biology and genetics into our programs. This partnership enhances the academic rigor and practical applications of our offerings, empowering students and educators alike.

Godfrey Okoye University

As our host institution, Godfrey Okoye University has been a cornerstone of DNALC Nigeria's growth. Their support has been instrumental in our efforts to create a vibrant academic community that fosters research, innovation, and excellence in education.

Bowie State University

Our partnership with Bowie State University has been one of our most significant. Together, we've developed programs like the Course-Based Undergraduate Research Experience (CURE) and the Undergraduate Research Experience (UREx), which have transformed the undergraduate experience for students in Nigeria.

London School of Economics

Through our collaboration with the London School of Economics, we have integrated advanced research methodologies and analytical tools into our programs, enhancing the academic rigor and global relevance of our offerings. Partnering with them have also enhanced the STEM BUSINESS arm of DNA LC Nigeria.

Maduka University & Enugu State University of Medicine and Applied Sciences (SUMAS)

These partnerships have expanded our reach, allowing us to offer specialized training programs to students in fields such as medicine and applied sciences. Together, we are developing the next generation of scientists and healthcare professionals who are equipped to tackle the challenges of the future.

Alex Ekwueme Federal University, Ebonyi State

Our collaboration with Alex Ekwueme Federal University has focused on building capacity in bioscience education, particularly in underserved regions. This partnership underscores commitment to making high-quality education accessible to all.

Godfrey Okoye University & Godfrey Okoye University College of Medicine

Perhaps our biggest cheer leader and partner, we have cultivated an ongoing academic training agreement that allows the students from the Natural Sciences faculty and the College of Medicine enrol into our hands-on programs that equip them to not nly understand the sciences but to prepare to practice and compete globally.

Our Partners & Supporters

Industry Collaborations and Sponsors

The support of industry partners and sponsors has been vital in enabling DNALC Nigeria to deliver high-impact programs and initiatives. These collaborations have provided us with the resources and expertise needed to stay at the forefront of scientific education and research.

Carnegie African Diaspora Fellowship

The Carnegie African Diaspora Fellowship has supported several of our key initiatives, including faculty exchanges and research collaborations. Their funding has been crucial in bringing together scholars from across the globe to contribute to our mission.

International Association of Universities (IAU)

Our relationship with the IAU has opened doors for international collaboration and exchange. Their support has enabled us to participate in global discussions on the future of higher education and to bring those insights back to Nigeria.

It is worthy of note that our partnerships and collaborations are not just alliances—they are equally the foundation upon which DNALC Nigeria has built its success. As we continue to grow, we remain committed to nurturing these relationships and working together to advance science education in Nigeria and beyond.

Board Members & Executive Team

The leadership at DNALC Nigeria is driven by a diverse and dedicated team committed to advancing our mission of excellence in scientific education and research. Our Board of Directors and Executive Team bring together a wealth of experience and a shared vision for the future.

Prof. George Ude
Director, DNALC Nigeria

As the Director of DNALC Nigeria, Prof. George Ude provides strategic direction and oversight, ensuring that the center remains true to its mission while adapting to the evolving needs of the scientific community.

His extensive background in molecular biology and his role as a faculty member at Bowie State University have been instrumental in shaping the center's research and educational initiatives.

Rev. Fr. Prof. Christian Anieke
Vice Chancellor, GOUNI

Prof. Anieke's outstanding and inspiring leadership as Vice Chancellor of Godfrey Okoye University has been pivotal in supporting the growth of DNALC Nigeria.

His emphasis on dialogue and collaboration has fostered a strong relationship between the university and the center, enabling both institutions to thrive and innovate together.

Dr. Dave Micklos
Executive Director, DNALC NY

A visionary leader, Dr. Dave Micklos is the founder of the original DNA Learning Center in New York. His commitment to public genetics education and his pioneering work in molecular biology have inspired the global expansion of DNALC, including the establishment of DNALC Nigeria.

Dr. Micklos continues to play a key role in guiding the center's strategic partnerships and international collaborations.

Michael Okoro
Deputy Dir., DNALC Nigeria

As the Deputy Director, and Assistant Director in Charge of Research & Training, Michael Okoro is responsible for the day-to-day management of DNALC Nigeria. His role borders on overseeing the center's operations, managing external collaborations, and ensuring that the center's programs align with its long-term goals.

With a strong background in research and training, he plays a critical role in maintaining the center's high standards of excellence. "Seeing the immense possibilities in the long-term investment in Science Education in Africa by African's made me come home"

A leader takes people where they want to go. A great leader takes people where they don't necessarily want to go, but ought to be.

Rosalynn Carter

Head of Units

The success of DNALC Nigeria is also a reflection of the dedication and expertise of our unit heads. Each leader brings unique skills and a commitment in our efforts to enhance science education and research in Nigeria.

Dr. Charles Uba
Coordinator of Research

Dr. Charles Uba leads the research efforts at DNALC Nigeria, driving innovation and excellence in the field of molecular biology. Under his leadership, the research team has produced significant findings that contribute to the global scientific community.

Dr. Uba's focus on integrating research into the educational experience ensures that students at DNALC Nigeria are always at the forefront of scientific discovery.

Florence Mgbodile
Coordinator of Workshop & Training

Florence Mgbodile is a Molecular Microbiologist and the coordinator of workshop and training at the DNA Learning Center Nigeria. She specializes in DNA technology, metagenomics, and genetic engineering.

Florence is committed to addressing public health challenges and leads Project Go-4-Wellness, a non-profit focused on health promotion. She brings expertise in laboratory management, research, and educational support.

Isaac Gaya
HR Manager

Isaac Gaya is the human resource manager at DNALC Nigeria and he plays a critical role in fostering a productive and supportive work environment while aligning human resource practices with the organization's mission. His role is pivotal in ensuring DNALC Nigeria attracts, retains, and develops top talent while fostering an inclusive and innovative work environment.

Pamela Ude
Finance Administrator

Ms. Pamela Ude is the finance Administrator of the center. She develops and implement financial strategies aligned with the center goals. She prepares, presents and maintains accurate financial records. She oversees all the financial aspects of the center, ensures compliance and provides financial insights to support decision making.

Chikezie Ogbonna
Head of Media and Communication

Chikezie Ogbonna oversees media relations, public relations, and communication strategies to ensure effective messaging & brand positioning across various media channels. He manages content creation, media relations, crisis communication, & supervises a team to maintain brand consistency and enhance communication effectiveness.

"If your actions inspire others to dream more, learn more, do more and become more, you are a leader."

John Quincy Adams

Meet Our Team

Our team is composed of experts in molecular biology, education, and research, all committed to advancing science and empowering the next generation of scientists.

Together, we bring a wealth of experience and passion to our mission, driving innovation and excellence in everything we do. With fresh perspectives, boundless energy, and a drive to push boundaries, we see every challenge as an opportunity and every success as a step toward shaping the future of science. We're proving that age is no barrier to making a lasting impact.

Lydia Itodo
Lead Instructor II

Ms. Lydia Itodo brings hands-on experience and expertise in Biotechnology and Bioinformatics to DNALC Nigeria. Her passion for teaching and leadership has expanded the center's training offerings and ensured high-quality workshops, making her a pivotal figure in the center's success.

Precious Anaba
Executive Assistant &
Secretary to the Director

Anaba Precious Sopuruchi is a detail-oriented Senior Executive Assistant to the Director of DNALC, with expertise in administrative and strategic support, ensuring seamless executive operations.

Olivia Okeugo
Data Analyst

Olivia, a Biotechnology graduate, serves as a Data Analyst at DNALC Nigeria. She excels in data analysis, possesses strong analytical skills, and is driven to leverage technology and science to address real-world challenges.

Queen Chiamaka
Executive Secretary &
Personal Assistant to Deputy. Director.

Queen Chiamaka provides administrative support to the Deputy Director, handling calendar management, correspondence, and meeting organization. She also serves as a liaison with stakeholders, maintains records, and assists with project coordination.

Eze Chisom
Admin / Laboratory Assistant

Chisom Eze is a Biology Educationist with a passion for science. She brings curiosity, innovation, and enthusiasm to our research team, driving meaningful contributions and advancing scientific knowledge.

Duke David
Media & Communication II

Duke David assists with media and communication at DNALC Nigeria, managing online presence, public relations, and promoting programs and events to reach a wider audience.

Favour Oguka
Intern

Favour Ogukah is a Biotechnology student at Godfrey Okoye University. She aims to apply biotechnology to promote global sustainability and is currently gaining practical experience through an internship at DNALC.

Blessing Omegu
Intern

Blessing Omegu is a Biotechnology undergraduate at Godfrey Okoye University. With a curious and observant nature, she's passionate about applying biotechnology to real-life problems and actively contributes to lab work during training sessions.

Blessing Omegu
Intern

Emmanuela is a student of GOUNI and a dedicated scholar. She is passionate about communicating what science entails and hopes to make African science global someday through science communication.

Mitotic Divisions into Centers

The DNALC Nigeria Science City will be organized into five specialized centers, each with a distinct focus but working together to achieve our overarching goals.

i. Center for DNA Forensics & Criminal Investigation (CeDFOCI): This center will focus on advancing forensic science in Nigeria, providing training and resources for law enforcement agencies, and developing new techniques for DNA analysis. CeDFOCI will play a crucial role in improving the accuracy and efficiency of criminal investigations, making justice more accessible and reliable.

ii. Center for Advanced Research & Innovation (CeFARAI): CeFARAI will be the hub for cutting-edge research in molecular biology, biotechnology, and related fields. This center will bring together leading scientists and researchers to tackle some of the most pressing challenges in science and technology, with a focus on developing solutions that have a direct impact on society.

iii. Center for Training and Advanced Studies (CeTRAS): CeTRAS will offer advanced training programs for students, educators, and professionals, with a focus on hands-on learning and research-based education. This center will also serve as a training ground for the next generation of scientists, equipping them with the skills and knowledge they need to succeed in the rapidly evolving field of science.

iv. Center for Science Animation & Visual Media Studios (CeSAVIMS): CeSAVIMS will use the power of visual media to make science more accessible and engaging. This center will produce educational videos, animations, and other visual content that can be used in classrooms, online courses, and public awareness campaigns, helping to demystify complex scientific concepts and inspire a broader interest in science.

v. Center for Startup Incubation, STEM Business Innovation & Entrepreneurship (CeSISTEN): CeSISTEN will be dedicated to fostering innovation and entrepreneurship in STEM fields. This center will provide support for startups and entrepreneurs, offering resources, mentorship, and training to help turn innovative ideas into successful businesses. By encouraging entrepreneurship in science and technology, CeSISTEN will contribute to economic growth and job creation in Nigeria.

Looking Forward: The Next Five Years

As DNALC Nigeria continues to grow, the next five years promise to be a period of transformative development and expansion. The establishment of the DNALC Nigeria Science City marks the beginning of a new chapter, where our commitment to innovation, education, and research will reach new heights.

Strategic Vision and Goals

Our strategic vision for the next five years is centered around three core goals: expanding our research capabilities, deepening our impact on education, and fostering global partnerships that drive scientific advancement.

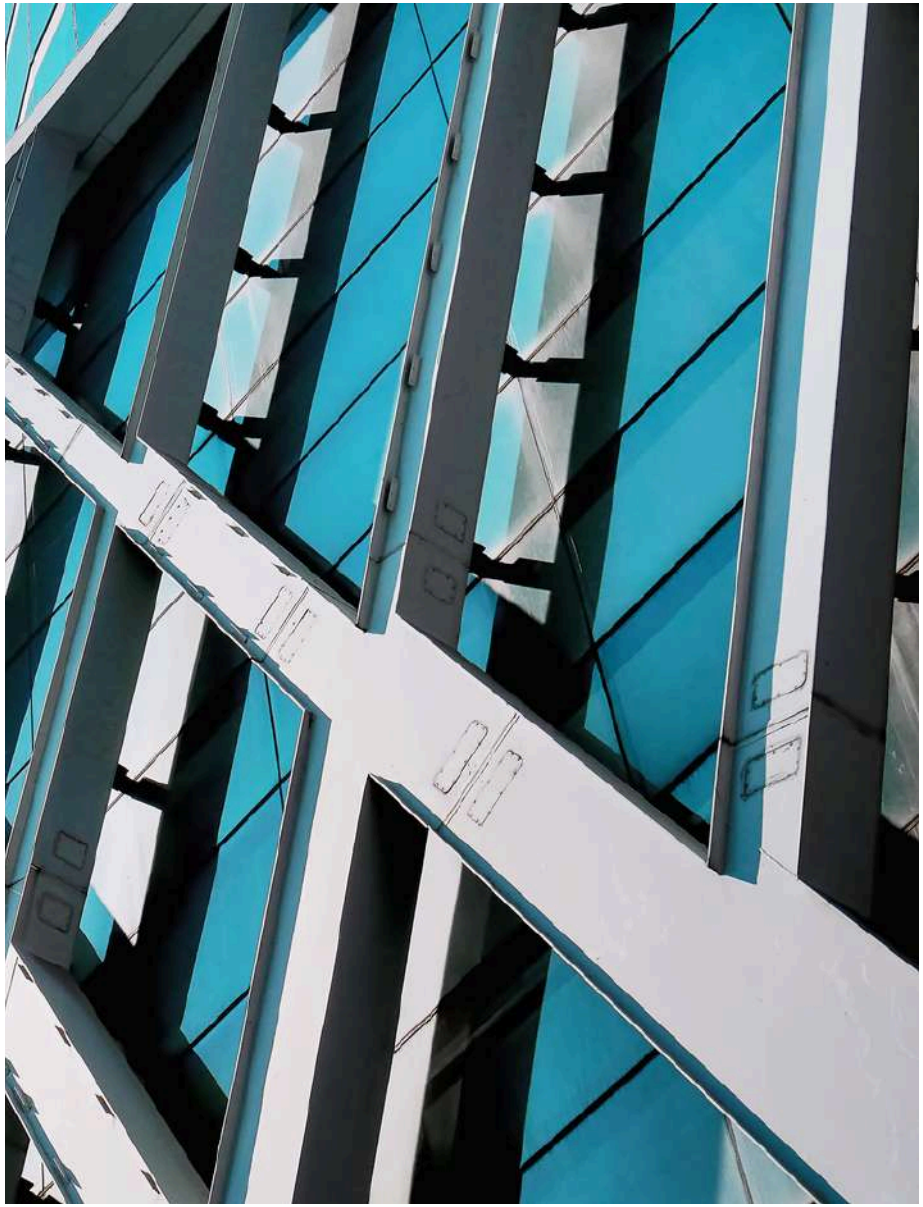
We envision DNALC Nigeria Science City as a hub of excellence, where cutting-edge research meets practical application, and where education is not just a pathway to knowledge but a gateway to solving real-world problems.

To achieve this, we will focus on:

- **Expanding Our Research Footprint:** By enhancing our research infrastructure and capabilities, we aim to position DNALC Nigeria as a leading center for molecular biology and biotechnology in Africa. Our research will continue to address critical challenges in healthcare, agriculture, and environmental science, with a particular focus on areas that are relevant to the Nigerian context.

- **Innovating in Education:** We will continue to innovate in the way science is taught, integrating research experiences into the curriculum and offering more opportunities for students to engage in hands-on learning. Our goal is to prepare a new generation of scientists who are not only knowledgeable but also equipped to lead and innovate.

- **Building Global Partnerships:** Expanding our network of global partnerships will be key to our strategy. By collaborating with leading institutions and organizations around the world, we aim to bring the best of global science to Nigeria, while also contributing our own insights and discoveries to the global community.



A SCIENCE CITY IS COMING TO NIGERIA

A novel initiative to create the world's first integrated science learning and STEM business incubation and entrepreneurial center.

This eco-friendly building will accommodate five distinct facilities (Centers) that will transform the way we do and publish science

WE ARE BRINGING IT HOME!

Turning an idea into reality is the triumph of vision over doubt.

We are excited to see our dreams materializing into action and possibilities become actualities.

Planned Projects & Initiatives

The DNA Forensics Initiative

A project aimed at advancing forensic science in Nigeria by developing new techniques and technologies that make forensic analysis more accessible and reliable.

STEM Education for All

An educational program designed to bring high-quality science education to underserved communities, using a combination of online platforms and in-person workshops.

Biotechnology for Sustainable Agriculture

A research initiative focused on using biotechnology to improve crop resilience and yield, with the goal of enhancing food security in Nigeria and across Africa.

Public Health Genetics

A research project aimed at identifying genetic markers for common diseases in Nigeria, with the goal of developing more effective and targeted treatments.

Objectives of Our Partnership

- **Collaborate on Research:** By working with international institutions, we will be able to undertake larger and more complex research projects that address global challenges.
- **Exchange Knowledge and Expertise:** Our partnerships will facilitate the exchange of knowledge and expertise, allowing our staff and students to learn from and contribute to the global scientific community.
- **Enhance Our Global Presence:** By participating in international conferences and research networks, we will increase the visibility of DNALC Nigeria on the world stage, attracting new opportunities for collaboration and funding.

Expansion Plans and Global Partnerships

The DNALC Nigeria Science City will be a focal point for our expansion plans. This state-of-the-art facility will house multiple specialized centers, each dedicated to a specific area of research or education.

Our expansion will also include the establishment of new partnerships with global institutions, enabling us to participate in international research projects and exchange programs.

Testimonials and Success Stories

Voices from Alumni and Beneficiaries

The impact of DNALC Nigeria's programs is best told through the experiences of those who have participated in them. Our alumni and beneficiaries come from diverse backgrounds, each bringing their unique perspectives and aspirations. Their stories highly reflect the transformative power of our courses and the lasting impact they have had on their personal and professional lives.

Mayowa Kujero
Animal Scientist

"Attending the Bioconservation course at DNALC Nigeria was a turning point in my career. The hands-on experience and the exposure to cutting-edge techniques in molecular biology have greatly enhanced my research capabilities.
I now have a deeper understanding of genetic conservation and its importance in preserving animal biodiversity. This knowledge has been instrumental in advancing my work as an animal scientist, particularly in developing strategies for conserving endangered species."

Mr. Agbo Sunday
A Postgraduate Student, ESUT

"The Basic Forensic and DNA Fingerprinting course at DNALC Nigeria was an incredible experience. As a postgraduate student at Enugu State University of Science and Technology (ESUT), I was looking for a program that would deepen my understanding of forensic science. This course did just that.
The hands-on training in DNA analysis and the insights from experienced instructors have prepared me to excel in my forensic research. I now feel more confident in pursuing a career in forensic science, knowing that I have the skills and knowledge to make a difference."

Mr. Azuka Mgbemena
Alumni of the Summer Professional Course

"Participating in the Summer Professional Course at DNALC Nigeria was a defining moment in my academic journey. The course on Basic Recombinant DNA Technology was both challenging and rewarding. The practical sessions were particularly valuable, as they gave me the confidence to apply what I've learned in real-world research settings. This experience has been crucial in my transition from student to researcher, and I'm grateful for the opportunity to learn from some of the best minds in the field."

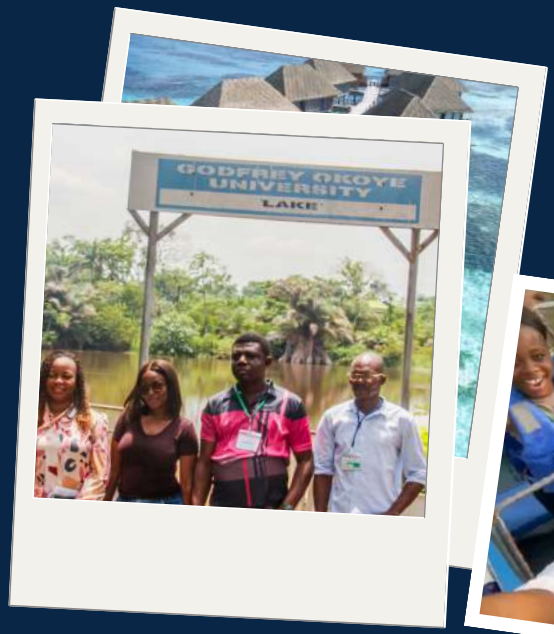
Dr. Chidimma Okafor
Educator

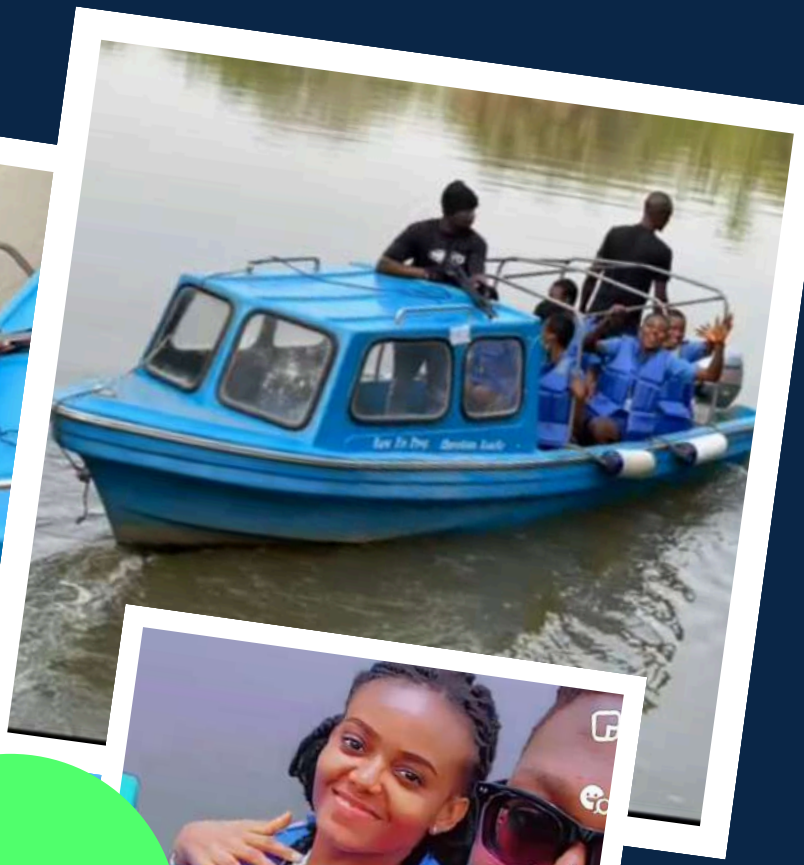
"As an educator, I'm always looking for ways to make science more engaging and accessible to my students. The Bio-conservation course at DNALC Nigeria provided me with the tools and knowledge to do just that. The practical approach to learning, combined with the support from the instructors, allowed me to bring new ideas into my classroom. My students are now more excited about biology, and I've seen a marked improvement in their understanding of the subject."

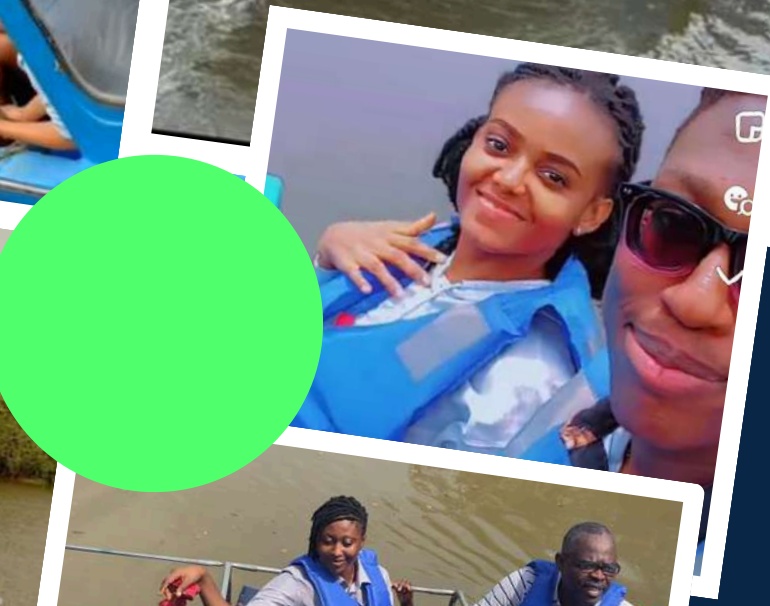
Dr. Obiefule, Medical
Laboratory Scientist

"The Genome Science Workshop was an eye-opener for me. As a medical laboratory scientist, I was familiar with the basics of DNA analysis, but the workshop took my understanding to a whole new level.
The detailed sessions on genome sequencing and bioinformatics have given me the skills to perform more complex analyses in my lab. I'm now better equipped to contribute to medical research and provide more accurate diagnoses for my patients."

BOAT CRUISE







GOUNI LAKE UGWUOMU-NIKE

Networking meets relaxation

Taking a moment to unwind and connect outside the usual lab setting.

NURTURING NATURE, ONE BLOOM AT A TIME

We actively engage in conserving biodiversity, ensuring that the natural world thrives for generations to come.

We cannot win this battle to save species & environment without forging an emotional bond between ourselves and nature, for we will not fight to save what we do not love

BIO-CONSERVATION IN ACTION

Our approach is not just about protection but nurturing the environment, one step at a time, as we build a future where nature and humanity coexist harmoniously.

Understanding Biodiversity using Metagenomics

Each species, no matter how small, contributes to the delicate circle of life, providing essential services like pollination, water purification, and climate regulation.

Protecting the Earth is our Responsibility

The Earth needs our protection now more than ever. Our planet, with its diverse ecosystems and life forms, is facing unprecedented challenges from pollution, deforestation, and climate change. Every action we take, whether large or small, has an impact.

Biodiversity remains the foundation of life on Earth

As we face growing environmental challenges, the need to protect and nurture biodiversity has never been more urgent.

Metagenomics






ABOUT IT

Metagenomics approach allows us to track changes in biodiversity, monitor pollution, and even discover new species.

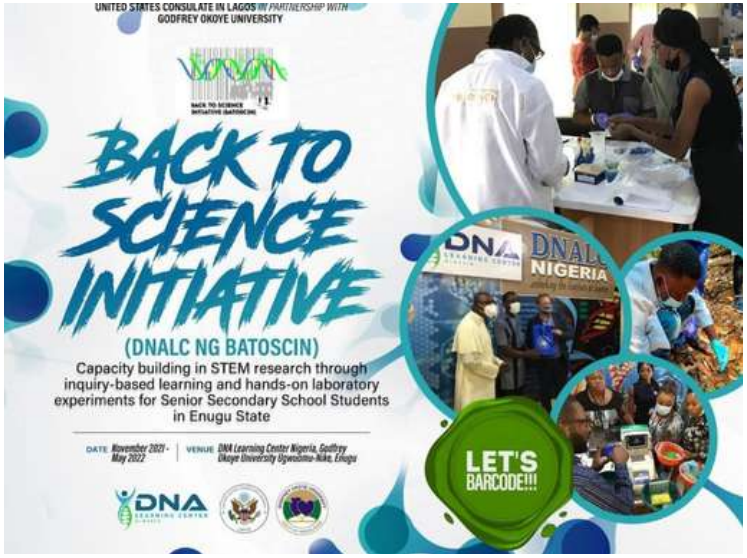
WHY METAGENOMICS?

This technique provides a powerful tool to decode the complex microbial interactions within our environment, helping us make informed decisions to protect and sustain our planet.



A WINDOW INTO THE UNSEEN WORLD AROUND US.

Back to Science Initiative (BATOSCIN)



Over 160 secondary school students and 40 teachers across Enugu State., benefited from this project.

Between 2021 and 2022, the US consulate supported DNALC Nigeria to train Enugu students and Teachers through the bactoscin project.

The BATOSCIN training provided an opportunity for underserved students and educators to be trained in practical molecular biology and laboratory techniques.

Back to Science Initiative

The Back To Science Initiative is one of the U.S. government's efforts to support the next generation in building their capacity in STEM fields, using inquiry-based learning and hands-on laboratory techniques.








Spotlight on the Bio-innovation Project

One of the highlights of the 2024 GOUNI Summer Professional Course was the inaugural BioInnovation Project, introduced to engender creativity, teamwork, and problem-solving skills among the participants. This initiative brought together brilliant minds from diverse fields to tackle real-world challenges through the lens of biotechnology.

Four dynamic teams – BioMed, BioFood, BioInd, and BioEnv – were formed, each selecting a unique area of focus. Their projects ranged from addressing public health issues to exploring innovative food technologies and sustainable industrial and environmental practices respectively.

Each team demonstrated remarkable effort and innovation. Team BioMed explored biotechnological strategies to combat tuberculosis, while Team BioFood focused on enhancing food security through sustainable practices. The first runner up, Team BioInd presented solutions aimed at driving industrial efficiency and sustainability through biofuel production.

Team BioEnv, led by Ms. Ikpeama Winifred eventually clutched the winning title. Their project which focused on creating a bioluminescent city using Ugwuomu-Nike community as a case study, captured the essence of innovation.

Spotlight on the Bio-innovation Project

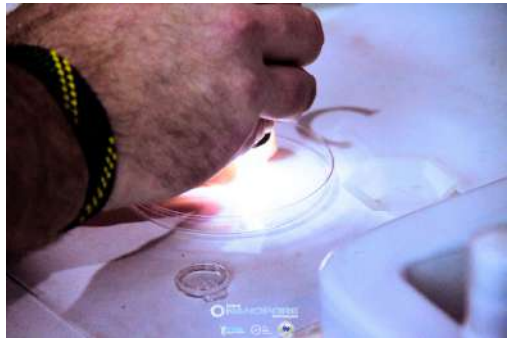
While Team BioEnv took home the grand prize, the other teams also made significant contributions and were rewarded with compensation prizes. Each team brought a unique perspective and demonstrated the power of collaborative effort in addressing complex challenges.

This being our first BioInnovation Project, we are proud of what has been achieved and look forward to even more impactful editions in the future.

Nanopore Sequencing Workshop at DNALC Nigeria

In January 2025, the DNA Learning Center (DNALC) Nigeria at Godfrey Okoye University buzzed with excitement as participants from diverse backgrounds converged for an intensive workshop on Nanopore Sequencing.

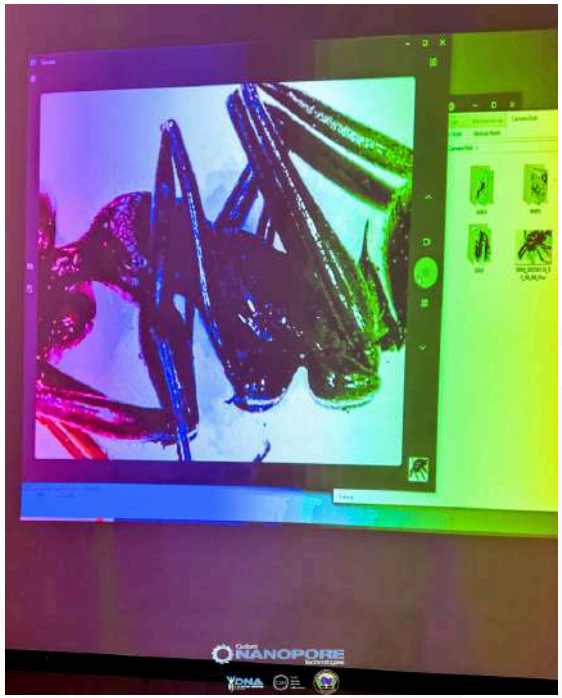
This hands-on training provided a practical introduction to the innovative MinION device, a game-changer for real-time DNA sequencing. Participants learned to harness this cost-effective platform for applications ranging from forensics to biodiversity studies, marking a significant step forward for genomics research in Nigeria.



Nanopore Sequencing Workshop at DNALC Nigeria

The workshop emphasized the transformative potential of Nanopore sequencing. Unlike traditional methods, Nanopore allows for the real-time sequencing of both short and long DNA fragments, opening doors to rapid analysis and discovery.

By integrating local biodiversity studies with advanced sequencing technologies, participants gained a deeper understanding of genomics' role in addressing critical scientific challenges while simultaneously building local capacity for cutting-edge research.



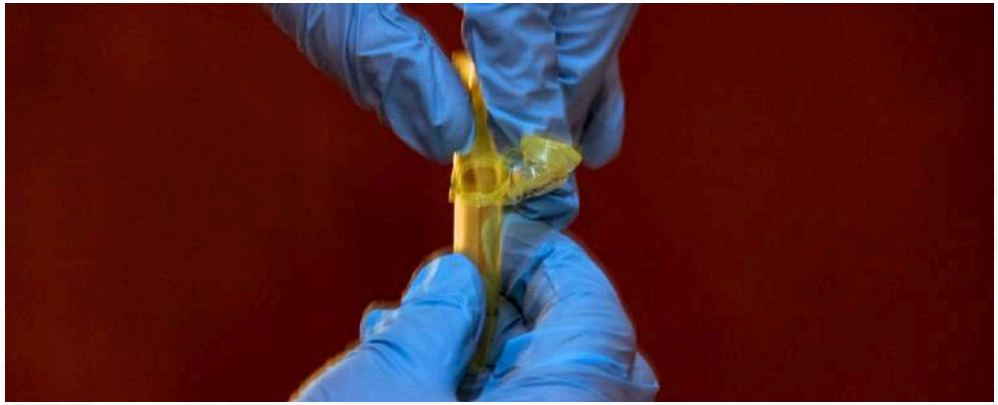
Hands-On Learning and Collaborative Discovery

The heart of the workshop was hands-on learning. Participants didn't just listen; they actively engaged in every step of the process. They brought ant samples from various locations, meticulously documenting collection sites. They extracted DNA from both ant specimens and soil samples using established protocols.

This process allowed participants to amplify the Cytochrome C Oxidase 1 (CO1) gene through PCR to generate DNA barcodes, sequenced the amplicons, analyzed with the DNA Subway 2.0 platform, and explored microbial diversity using 16SS rRna metabarcoding.

Key Skills Developed:

- DNA Extraction using Chelex and Qiegen Power Soil Pro kit
- PCR Amplification of CO1 gene
- Nanopore Sequencing using MinION Mk1B device
- Data Analysis with DNA Subway 2.0
- 16S rRNA Metabarcoding for Microbial Diversity Analysis



Hands-On Learning and Collaborative Discovery

The workshop fostered interdisciplinary collaboration, uniting individuals from academia, research institutions, and government entities. This collaborative environment enriched the learning experience and facilitated the exchange of ideas.

It underscored DNALC Nigeria's commitment to bridging the gap between science education and practical applications, empowering participants to leverage cutting-edge technologies for impactful research and societal advancement.

Investing in the Future of Genomics in Africa

Looking Ahead:

The Nanopore Sequencing Workshop represents a significant stride in advancing genomics research and education in Nigeria and beyond. DNALC Nigeria's commitment to providing hands-on training and fostering collaboration is empowering a new generation of scientists to tackle pressing global challenges. As one participant noted, the workshop was "insightful, impactful, and well-organized," setting the stage for continued innovation and discovery in the years to come. With visionary leadership and unwavering support, DNALC Nigeria is shaping the future of science in Africa.

Soilless Farming: Growing Food Crops for a Sustainable Future

Our commitment to innovation and sustainability continues with our latest hydroponics project. Building on the success of our previous endeavors, where we successfully cultivated various leafy vegetables like lettuce, Amaranthus, and basil using catfish effluent, we're now turning our focus to one of the key ingredients in many Nigerian dishes: tomatoes.

This time around, we're experimenting with local breeds of tomatoes, employing the same efficient hydroponic systems that have yielded remarkable results in our past projects. The goal is to not only enhance the quality and yield of these tomatoes but also to provide a model for sustainable agricultural practices that can be adopted across the region.

Hydroponics allows us to grow crops without soil, using nutrient-rich water instead. This method not only conserves water but also maximizes space and eliminates the need for harmful pesticides. Utilizing catfish effluent allows us to create a closed-loop system that reduces waste and provides essential nutrients to the plants, promoting healthier and faster growth.

As we continue to push the boundaries of hydroponic farming, we are excited about the possibilities this method holds for the future of agriculture in Nigeria. In addition, focusing on local breeds of tomatoes will contribute to food security and support local farmers with sustainable and innovative farming techniques.

You can expect more updates on the progress of this project soon. We cannot wait to see the fruits—quite literally—of our labor, and we hope to inspire others to embrace hydroponics as a viable solution for the challenges facing traditional agriculture.

Acknowledgement & Gratitude

We also want to acknowledge the incredible efforts of our volunteers. Your commitment and passion have brought energy and enthusiasm to every aspect of our work. From assisting in workshops and events to supporting our research initiatives, you have played an important role in advancing our mission. Your willingness to give your time and talents has made a lasting impact on DNALC Nigeria and the community we serve. You will always remain a part and parcel of this great citadel of learning.

Message of Thanks to Donors and Sponsors

To our donors and sponsors, we owe a special debt of gratitude. Your generous support has provided the resources needed to turn our vision into reality. From funding our educational programs to supporting our research projects, your contributions have enabled us to make a tangible difference in the lives of our students and the broader scientific community.

We are particularly grateful to the Carnegie African Diaspora Fellowship for their continued support, which has been pivotal in bringing international expertise to our programs and expanding our research capabilities. Your commitment to advancing science in Africa has been a driving force behind many of our achievements.

We also thank the US Consulate, British Council, and Enugu State Government for their steadfast support, which has been essential in facilitating our growth and ensuring the sustainability of our initiatives. Your involvement has strengthened our ability to provide high-quality education and research opportunities to a broader audience.

To all our donors and sponsors, we want you to know that your contributions are not just financial—they are investments in the future of science education and research in Nigeria. Your support has empowered us to pursue excellence, innovate, and inspire the next generation of scientists. We are deeply grateful for your partnership and look forward to continuing this journey together.

We wouldn't have been able to do it without your support.

Acknowledgement & Gratitude

As DNALC Nigeria reaches this significant milestone, we are deeply aware that our journey would not have been possible without the support of our stakeholders, volunteers, donors, and sponsors. This section is dedicated to expressing our heartfelt gratitude to all those who have contributed to our success.

Appreciation to Stakeholders and Volunteers

To our stakeholders, who have believed in our vision from the very beginning, we extend our deepest thanks. Your guidance, expertise, and commitment have been instrumental in shaping DNALC Nigeria into the leading institution it is today. Whether through strategic advice, collaboration on projects, or helping to expand our reach, your contributions have been invaluable.

Here, learning never stops

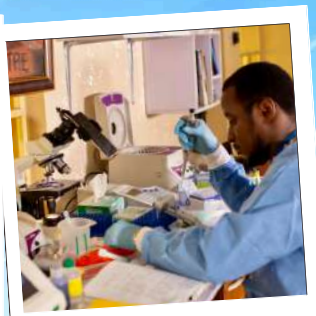


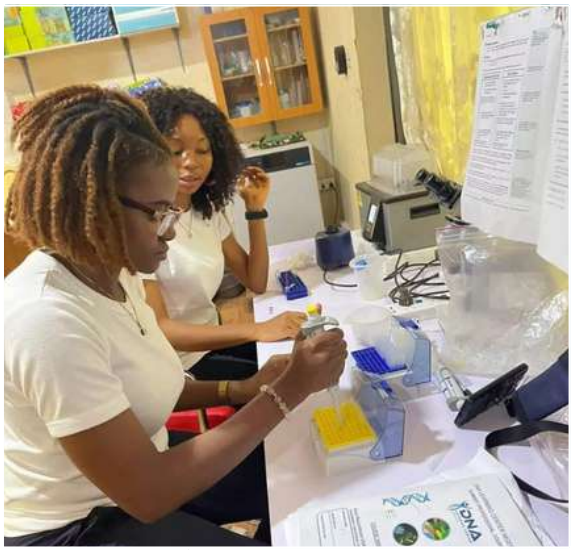





Lab Scrap book











Catch the memories and the fun that comes with them.

Join Our Network: Get Involved Today!

Participate

Check out our workshops, training sessions, and conferences to enhance your knowledge and skills. Our programs are designed for a wide range of participants, from beginners to advanced professionals.

Collaborate

If you're an academic institution, industry partner, or government agency, consider collaborating with us on research projects, educational initiatives, or community outreach programs. We welcome partnerships that align with our mission of advancing science education and research.

Volunteer

Contribute your time and expertise to support our events, workshops, and research activities. Volunteering with DNALC Nigeria is a rewarding way to give back to the community and make a difference in the lives of others.

Donate

Support our mission by making a donation. Your contributions help us continue providing high-quality education and research opportunities to students and professionals across Nigeria.

To learn more about these opportunities and how to get involved, visit our website or contact us directly.

Follow us on social media to stay updated on our latest news, events, and research highlights. Our social media platforms are also great places to connect with other members of the DNALC Nigeria community and participate in ongoing discussions about science and education.

NO MATTER WHERE YOU ARE, WE ARE ALWAYS CLOSE

Follow us on these social media handles:

@ dnalcnigeria

Staying connected with DNALC Nigeria is easier than ever. Whether you're looking to follow our latest developments, participate in our programs, or become a part of our growing community, we provide several ways for you to stay engaged.

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