

DANIEL ADEWOLE ADEDIRAN

+2349037594588 | adedirandanieladewoleo4@gmail.com |  Dexwel |  Danieladediran

PROFESSIONAL SUMMARY

Public health professional with 1+ years of experience in epidemiology, with a focus on data analysis, program management. I am passionate and working on designing, implementing, and evaluating health programs at local, national, and international levels. Strong interest in both quantitative/qualitative research, cross-sectoral collaboration, and policy advocacy.

EDUCATION

Master of Public Health | Bingham University Jan, 2025- Present

Selected Course work: Epidemiology, Biostatistics, Research Methodology, Health Policy, Global Health

B. Tech Biochemistry | Ladoke Akintola University of Technology Ogbomosho, Nigeria Aug, 2018 – May, 2023

CGPA: 4.36/5.0

Relevant coursework: Molecular Genetics, Forensic Biochemistry, Endocrinology, Neurobiochemistry.

Academic project: Assessment of *Zingiber officinales* on Tramadol-Induced Nephrotoxicity in Rat

PROFESSIONAL EXPERIENCE

Health Data Scientist | DataLab Nigeria May, 2024–Present

- Designed educational video content and documentation for Bioinformatics, Linux, and biological databases, contributing to the launch of a scalable Learning Management System.
- Streamlined bioinformatics learning paths by developing structured curriculum modules adopted in training workshops.
- Reviewed and improved bioinformatics scripts used in training, increasing execution efficiency by 25%.

Prompt Engineer Intern | eHealth4everyone May–Sept 2024

- Designed and deployed an IT Support chatbot using Slack APIs and Chatbase, reducing issue resolution time by 35%.
- Created 5+ structured prompt templates for both PRDs and URDs, improving team productivity by 40% via TeamGPT.
- Started the multi-agent AI system for MSDAT reports used by Federal Health agencies, to reduce the manual reporting time by 60%.
- Worked in a cross-functional AI team to align outputs with epidemiological needs and ensure prompt delivery.

Research & Development Assistant II | Helix Biogen Institute Jan, 2022–Dec, 2023

- Contributed to peptide-based diagnostic kit development for *Treponema* spp. using in silico bioinformatics approaches.

- Led 17 research interns in computational vaccine design for Nipah virus and COVID-19, facilitating 2 grant proposals.
- Developed standard operating procedures for vaccine design, enhancing reproducibility of results by 50%.
- Coordinated weekly review sessions to improve project timelines and research deliverables.
- Trained 200+ participants in MEGA, Vaxijen, and IEDB toolkit applications for vaccine and immunology research.

Intern | BigDataBiology, Fudan University (Remote)

May–Oct, 2023

- Mastered Python libraries (Pandas, Matplotlib) to analyze and visualize genomic metadata from Shanghai dog samples.
- Completed version control assignments using Git, improving collaborative code sharing.
- Attended weekly feedback meetings with mentors to refine analysis methods and presentation.

Fellow | Oluseun Onigbinde Fellowship

May–July, 2023

- Conducted exploratory data analysis on social data using Excel and Power BI, developing 4 actionable insights.
- Created dashboards that informed local development initiatives

VOLUNTEER EXPERIENCE

Program Officer | SDGs CDS NYSC Tafa LGA

Dec, 2023–Nov, 2024

- Organized 3+ webinars and local education programs promoting climate action and sustainability.
- Secured 3 expert speakers and increased local awareness of SDGs through structured events.
- Shared 10+ funding and training opportunities with corps members, fostering engagement.
- Partnered with LG stakeholders to align community events with SDG principles.

Scientific Manager I | Panoramics-Vision

June, 2023–Jan, 2024

- Built and maintained a database of African single-cell omics researchers, aiding in collaborations.
- Curated and posted 20+ peer-reviewed articles in Slack channels, sparking technical discussion.
- Coordinated monthly theme series on spatial transcriptomic to encourage peer learning.
- Tracked article engagement metrics to refine content strategies.

SELECTED PUBLICATIONS

- Oladipo EK, Olufemi SE, **Adediran DA**, Adejumo IO, Jimah EM, Oloke JK, Udekwu CC, Ogunwobi OO. Epigenetic modifications in solid tumor metastasis in people of African ancestry. *Front Oncol.* 2024 Feb 21;14:1325614. doi: 10.3389/fonc.2024.1325614.

- Oladipo, Elijah Kolawole, Seun Elijah Olufemi, Taiwo Ooreoluwa Ojo, **Daniel Adewole Adediran**, Akindele Felix Idowu, Usman Abiodun Idowu, and Helen Onyeaka. 2023. "Africa (COVID-19) Vaccine Technology Transfer: Where Are We?" *Life* 13 (9): 1886.
- Oladipo, Elijah Kolawole, Taiwo Ooreoluwa Ojo, Seun Elijah Olufemi, Boluwatife Ayobami Irewolede, **Daniel Adewole Adediran**, Asegunloluwa Grace Abiala, Oluwaseun Samuel Hezekiah, et al. 2023. "Proteome Based Analysis of Circulating SARS-CoV-2 Variants: Approach to a Universal Vaccine Candidate." *Genes & Genomics*, August. <https://doi.org/10.1007/s13258-023-01426-1>.
- Oladipo, E. K., Jimah, E. M., Irewolede, B. A., Folakanmi, E. O., Olubodun, O. A., **Adediran, D. A.**, Akintibubo, S. A., Odunlami, F. D., Olufemi, S. E., Ojo, T. O., Akinro, O. P., Hezekiah, O. S., Olayinka, A. T., Abiala, G. A., Idowu, A. F., Ogunniran, J. A., Ikuomola, M. O., Adegoke, H. M., Idowu, U. A., Akindiya, O. E., ... Adelusi, T. I. (2022). Immunoinformatics design of multi-epitope peptide for the diagnosis of *Schistosoma haematobium* infection. *Journal of biomolecular structure & dynamics*, 1–8. Advance online publication. <https://doi.org/10.1080/07391102.2022.2111358>.
- Oladipo, E. K., Akindiya, O. E., Oluwasanya, G. J., Akanbi, G. M., Olufemi, S. E., **Adediran, D. A.**, Bamigboye, F. O., Aremu, R. O., Kolapo, K. T., Oluwasegun, J. A., Awobiyi, H. O., Jimah, E. M., Irewolede, B. A., Folakanmi, E. O., Olubodun, O. A., Akintibubo, S. A., Odunlami, F. D., Ojo, T. O., Akinro, O. P., Hezekiah, O. S., ... Babalola, M. O. (2022). Bioinformatics analysis of structural protein to approach a vaccine candidate against *Vibrio cholerae* infection. *Immunogenetics*, 1–16. Advance online publication. <https://doi.org/10.1007/s00251-022-01282-5>
- Oladipo, E.K.; Adeniyi, M.O.; Ogunlowo, M.T.; Irewolede, B.A.; Adekanola, V.O.; Oluseyi, G.S.; Omilola, J.A.; Udoh, A.F.; Olufemi, S.E.; **Adediran, D.A.**; Olonade, A.; Idowu, U.A.; Kolawole, O.M.; Oloke, J.K.; Onyeaka, H. Bioinformatics Designing and Molecular Modelling of a Universal mRNA Vaccine for SARS-CoV-2 Infection. *Vaccines* 2022, 10, 2107. <https://doi.org/10.3390/vaccines1>

CERTIFICATIONS

- Project Management Professional (PMP), (ICBMD)
- Next Generation Sequencing (NGS) Analysis (H3ABioNet)
- Single Cell RNA Sequencing Analysis (Human Cell Atlas)
- Train the Trainer Workshop (H3ABioNet, Wellcome Connecting Science and EBI)
- Cancer Genome Analysis Training (Wellcome Connecting Science)

TECHNICAL SKILLS

- **Programming:** R, Python, Bash, Shell scripting
- **Bioinformatics:** Bioconductor, Seurat, DESeq2
- **Visualization & Analysis:** ggplot2, dplyr, RShiny, pandas, numpy, matplotlib
- **Machine Learning:** supervised learning, random forest, image classification and segmentation.
- **Epidemiology Tools:** EpiVerse packages
- **Communication:** Canva, PowerPoint, Miro for visual facilitation
- **Languages:** English (fluent), Yoruba (native)

GRANTS AND AWARDS

- Poster Award Winner of Nnamdi Azikwe Bioinformatic Genomics Consortium, 2022.
- Student Scholarship to attend RNA Therapeutic Symposium: From concept to clinic, 2022.
- Dan Kohn Scholarship to virtually attend KubeCon+CloudNativeCon Europe, 2023.
- Recipients of eDNA micro-grant to participate in Physalia course (R package Development), 2023.
- Kaggle Career Development Scholarship recipient, 2023.
- Scholarship to attend Rotavirus conference 2023 at Abuja, Nigeria.

SCIENCE COMMUNICATIONS

- Poster presentation at Nnamdi Azikiwe Bioinformatic Genomics Consortium
- Seminar presentation on Design of diagnostic kit for Schistosoma haematobium infection
- Group presentation on Identification of drug target in differentially expressed genes
- Beyond Science Initiative conference 2023 on the computation design of mRNA Vaccine for Lassa virus infection [[Conference 2023 | 20230271 | Daniel A. Adediran](#)]
- Poster presentation at Africa Rotavirus conference on *Rotavirus Infection in Africa: Unravelling Genetic Diversity for Targeted Intervention*

PROFESSIONAL AFFILIATIONS

- H3ABioNet Trainer Network
- International Society of Computational Biology
- Human Cell Atlas
- Carpentry Instructor Community
- Africa Society of Bioinformatics and Computational Biology