

COBREG

2024

**14th Convention of Biomedical Research,
Ghana**

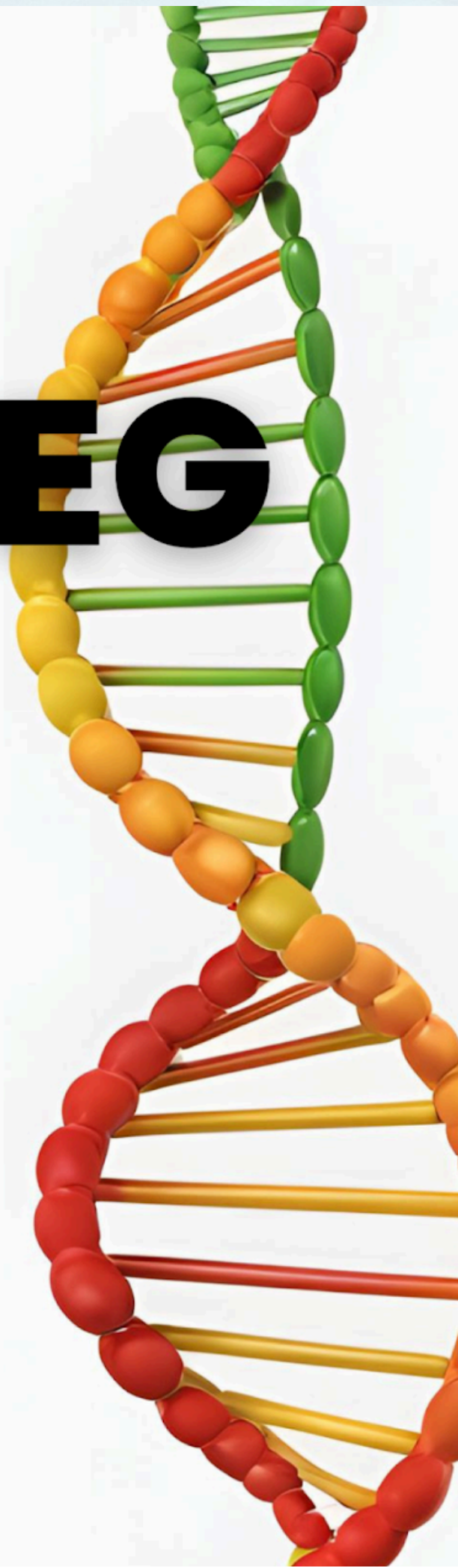
28th - 30th August, 2024

Theme:

**Advancing Biomedical Innovation in Africa for
Health Research and Outcomes**

**Noguchi Memorial Institute for Medical Research
Auditorium
University of Ghana
Legon**

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14th Convention of Biomedical Research, Ghana

Theme: Advancing Biomedical Innovation in Africa for Health
Research and Outcomes

Noguchi Memorial Institute for Medical Research Auditorium

University of Ghana

Legon

28th – 30th August 2024

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Conference Program Overview

DAY 1 - Wednesday, 28th August 2024

7:00 – 8:50am

Registration, Poster Set-up

9:00 – 9:30am

Opening Ceremony

9:30 – 10:20am

Keynote Address 1

10:20 – 11:00am

Coffee Break

11:00 – 12:00pm

Oral Session I

12:00 – 12:20pm

Question Time

12:20 – 1:20pm

Oral Session II

1:20 – 1:40pm

Question Time

1:40 – 2:40pm

Lunch

2:50 – 4:40pm

Poster Session I – Even Numbers

4:40 – 5:40pm

Oral Session III

5:40 – 6:00pm

Question Time

6:00pm

Poster Viewing and Networking

DAY 2 - Thursday, 29th August 2024

8:00 – 8:50am

Registration

8:50 – 9:00am

Announcements

9:00 – 9:50am

Keynote Address 2

9:50 – 10:30am

Coffee Break

10:30 – 11:30am

Oral Presentation IV

11:30 – 11:50am

Question Time

11:50 – 12:05pm

Vendor Talk

12:05 – 1:05pm

Oral Presentation V

1:05 – 1:25pm

Question Time

1:25 – 2:25pm

Lunch

2:25 – 4:00pm

Poster Session – Odd Numbers

4:00 – 5:00pm

Oral Presentation VI

5:00 – 5:20pm

Question Time

5:30pm

Cocktail - Social Event

DAY 3 - Friday, 30th August 2024

8:00 – 8:50am

Registration

8:50 – 9:00am

Announcements

9:00 – 9:50am

Keynote Address 3

9:50 – 10:30am

Coffee Break

10:30 – 11:30am

Oral Presentation VII

11:30 – 11:50am

Question Time

11:50 – 1:30pm

General Meeting

1:30 – 1:45pm

Closing Ceremony

1:45pm

Lunch

3:00pm

Board Meeting

Plenary Sessions

Day 1: Wednesday, August 28, 2024

Session 1: Public Health (11:00 – 12:00pm)

- **1:** Molecular epidemiology of diabetic foot ulcers
Presenter: Samuel Mensah
- **29:** Isolation and identification of microbial contaminants in Shea butter sold in Northern region of Ghana
Presenter: Rita Selorm Dovi Attah
- **31:** Detection of Occult Hepatitis B Infection in Treatment-Naive HIV-positive Patients in the Cape Coast Metropolis in Ghana
Presenter: Emmanuel Salia
- **36:** COVID-19 Booster Vaccine Effectiveness and Immune Checkpoint Marker Kinetics Amongst SARS-CoV-2 Vaccinated Persons in Ghana
Presenter: Frank Osei
- **39:** Detection and Characterisation of Non-Tuberculous Mycobacterium in Ready-for-Market Fish in Ghana
Presenter: Tabitha Koney

Session 2: Clinical Research (12:20 – 1:20pm)

- **77:** Targets of CSP-based Malaria Vaccines: What We Missed in 1987 and What is Missing Now
Presenter: Franklin Yengdem Nuokpem
- **15:** PSA Levels above 10ng/mL are Not Enough to Discriminate Between Benign and Malignant Prostate Pathology; A Retrospective Study
Presenter: Gabriel Pezahso Kotam
- **33:** Three Novel Epigenetic-Modifying Compounds Identified as HIV Latency-Reversing Agents in Ghana
Presenter: Christopher Abana
- **50:** A Comparative Assessment of Immune Responses Against Two COVID-19 Vaccines Used as Boosters in Ghana
Presenter: Precious Kumi
- **63:** Comparative Evaluation of RT-PCR and Antigen-Based Rapid Diagnostic Tests (Ag-RDTs) for SARS-CoV-2 Detection: Performance, Variant Specificity, and Clinical Implications
Presenter: Frank Twum Aboagye

Session 3: Genomics, Molecular Biology, Molecular, and Cellular Pathology (4:40 – 5:40pm)

- **13:** The Effects of Probiotic Administration on the Brain Histomorphology of Stress-Induced Depressed Mice
Presenter: Atakorah Amaniampong Osei
 - **37:** Antibody Responses to Multiple Plasmodium falciparum Antigens in School Children Naturally Exposed to Malaria in Central Region, Ghana
Presenter: Abukari Zakaria
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- **47:** Assessing Plasmodium falciparum Gene Markers Associated with Chloroquine and Artemisinin Resistance in Isolates from Southern Ghana
Presenter: Elaine Asiwome Boadu
 - **56:** High Prevalence of ESBL Genes in Commensal Escherichia coli of the Urinary Tract: Implications for Antibiotic Stewardship among Residents of Ghanaian Elderly Nursing Care Homes
Presenter: Emmanuel Armah
 - **57:** Hunting for Biomarkers to Monitor Pulmonary Tuberculosis Treatment Progress: The Role of Immune Cells Exhaustion, Inflammatory and Cellular Activity Markers in PBMCs
Presenter: Williams Walana
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Day 2: Thursday, August 29, 2024

Session 4: Bioinformatics, Biomathematics, and Bioengineering (10:30 – 11:30am)

- **4:** In-silico and In-vitro Investigation of Antiviral Compounds for Potentially Inhibiting Dengue Virus NS2B-NS3 Protease
Presenter: Hassan Kotey
 - **53:** Towards Computational Assessment of Iron Deficiency
Presenter: Emmanuel Adabor
 - **55:** MedcanDetect: Breast Cancer Detection Using Deep Learning
Presenter: Gershon Teye Agbashie
 - **43:** Chemostat: The New Kid on the Block in Continuous Cultures
Presenter: Kwaku Owusu Darko
 - **65:** Breast Cancer Prognosis in African Women: Links Between Basal-Like Molecular Sub-Type, Low MID2, and High CACTIN Expression
Presenter: George Acquah-Mensah
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Session 5: Nutrition, Plant Medicine, Disability Studies, and Capacity Development (12:05 – 1:05pm)

- **9:** Nutritional Quality, Microbial Safety, and Sensory Acceptability of Ready-to-Use Complementary Foods
Presenter: Agyemang Opoku-Yeboah
 - **45:** Exploring the Antidepressant-like Potential of Persicaria lanigera Leaf Extract and Its Associated Mechanisms of Action in Mice
Presenter: Hawawu Osmanu
 - **52:** Development of Shelf-Stable Tiger Nut Milk Through Starch Modification and Enzymatic Techniques
Presenter: Peter Tettevi
 - **54:** Perception of People About Persons Living with Disabilities – A Case Study of the 1st African Paralympic Games, Accra, Ghana
Presenter: Kate Adomakowaah Kontor
 - **3:** Socio-Demographic Determinants and Dietary Non-Adherence of People Living with Type 2 Diabetes Mellitus in Two Selected Rural Communities in Ashanti: A Cross-Sectional Protocol
Presenter: Afriyie Addae
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Session 6: Chemistry, Biochemistry, and Toxicology (4:00 – 5:00pm)

- **10:** Gestational Glucose Intolerance Among Pregnant Women at the Cape Coast Teaching Hospital
Presenter: Nelson Kumah
 - **30:** In Vivo Safety and Efficacy of ILX-002 – A Novel Direct Hemoglobin S Polymerization Inhibitor for the Treatment of Sickle Cell Disease
Presenter: Martin Safo
 - **64:** Guanine Derivatives are Potential Analogues for the Development of Purine-Based Antimalarial Drugs
Presenter: Worlanyo Tashie
 - **78:** Novel Pyrazolyl Sulphonamide Derivatives Exhibit Antibacterial Activity Against Selected Gram-Positive Bacteria in Vitro
Presenter: Jesse A. Anak
 - **83:** Prolonged Duration of Air-Dry Fixation of Cervical Smears Produces Superior Cytomorphological Staining Quality Over Conventional Wet-Fixed Smears
Presenter: Kwabena Danquah
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Day 3: Friday, August 30, 2024**Session 7: Genomics, Molecular Biology, Molecular, and Cellular Pathology (10:30 – 11:30am)**

- **59:** Profiling the Phenotypic and Molecular Effects of Polymyxin B and Carbapenem on Biofilm Formation in *Acinetobacter* sp.
Presenter: Basma Oboyse Abdul-Lahie
 - **67:** Protein Sequence and Structure, and Antibody Profile of the AMA1 from Three *Plasmodium* Species
Presenter: Josiah Affum
 - **69:** Unveiling Immunodominant Regions of PfCERLI1: Insights for Malaria Vaccine Development
Presenter: Comfort Kotey
 - **70:** Exploring the Potential of Biologically Synthesized Silver Nanoparticles (AgNPs) for the Treatment of Multi-Drug Resistant (MDR) *Salmonella* Strains
Presenter: Alimatu Mostafa
 - **72:** Genomic Analysis of Antibiotics Resistance in Enterobacteriaceae Bacteria Isolated at Cape Coast Teaching Hospital
Presenter: Bismark Donkor
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List of Abstracts for Poster Presentations

- **2:** Intestinal Parasitic Infections and Predisposing Factors among Prison Inmates in Southern Ghana
Presenter: Albert Abaka-Yawson
 - **5:** Mixed-methods exploration of the knowledge about anaemia causes and prevention in reproductive aged women; a two-center study
Presenter: Diana Morrison
 - **6:** Burnout and its Associated Effect on Work Productivity Among Nurses in Korle Bu Teaching Hospital
Presenter: Frances B. Otoo-Kati
 - **7:** Workplace Violence Against Healthcare Workers in Selected Health Facilities in the Bono-East and Northern Regions of Ghana
Presenter: Frances B. Otoo-Kati
 - **8:** Urine Human Papilloma Virus Testing as a Tool for Cervical Cancer Screening Among Women in Ho Municipality, Volta Region, Ghana
Presenter: Philip Osardu Quaye
 - **11:** Purification and characterization of IgG antibodies against the spike and nucleocapsid proteins of SARS-CoV-2, utilizing Enzyme-linked Immunosorbent assays
Presenter: Dorah Korkor Mensah
 - **12:** Evaluation of Ethyl Methane Sulphonate (EMS) Treated M2 Generation Cowpea (*Vigna unguiculata* (L) Walp) Seeds
Presenter: Barbara Dankwa
 - **14:** Screening for serum biomarkers (Cea, Scc-Ag, and Ca 125) in cervical cancer patients in Ghana
Presenter: Shaibu Adam Avorgbedor
 - **16:** Diagnostic Value of Full Blood Count Derived Systemic Inflammatory Biomarkers in Malaria Infection
Presenter: Joel Karikari Nyarkoh
 - **17:** The Effects of IL-2 and Anti-CD28 on Malaria Specific T-Cell Responses
Presenter: Rafiatu Abdul-Mumin
 - **18:** Hepatitis Viruses Among Blood Donors in the Ho Municipality
Presenter: Christopher Ofosu Adjei
 - **19:** *Helicobacter pylori* BabA2 and IceA Genes in Dyspeptic Patients in Ghana
Presenter: Gabriel Emmanuel King
 - **20:** Prevalence and Genotypes of Cervical Human Papillomavirus in Pregnant Women in Ho Municipality
Presenter: Richard Harry Asmah
 - **21:** Detection of Herpes Simplex Virus Genotypes in Pregnant and Non-Pregnant Ghanaian Women
Presenter: Richard Harry Asmah
 - **22:** Prevalence of *Helicobacter pylori* BabA2 Gene in Biopsies from Dyspeptic Patients in Ghana
Presenter: Ewoenam Akoto
 - **23:** Infertility in Ghanaian Men: Investigations Using DNA Comet Assay
Presenter: Emmanuel K. Asante
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- **24:** Incidence of Respiratory Syncytial Virus Infection Among Confirmed Covid-19 Cases in Ghana
Presenter: Evangeline Obodai
 - **25:** Assessing the Effectiveness of Marine Plasma Preparations on *P. falciparum* Growth in Vitro
Presenter: Cecilia Adwoa Biao Yankey
 - **26:** Gene Variants of Glucose-6-Phosphate Dehydrogenase Deficiency in Pregnant Women in Ho Municipality, Volta Region
Presenter: Christopher Ofosu Adjei
 - **27:** Genetic Association Between HLA-G 14BP Polymorphisms and Malaria Severity Among Iron Fortified Ghanaian Children
Presenter: Charlotte Quaye
 - **28:** Quality Assessment of Fresh Cut Fruits Sold on the University of Ghana Campus
Presenter: Emmanuella Senior Gyimah
 - **32:** Anti-circumsporozoite Protein Antibodies as Markers for Malaria Transmission Monitoring
Presenter: Linda Akuffo
 - **34:** Quality of Routine Malaria Data Captured at Primary Health Facilities in the Hohoe Municipality, Ghana
Presenter: Christopher Ayisah
 - **35:** Prevalence of *Plasmodium falciparum* Parasites with Pfhrp2 Exon 2 Gene Deletion in Symptomatic Malaria Patients Across Ghana, During the Peak Season in 2021
Presenter: Dorcas Gyamah Bredu
 - **38:** Longitudinal Assessment of *Plasmodium* Parasite Carriage in a Cohort of School Children in the Central Region of Ghana
Presenter: Bernice Abban
 - **40:** Surveillance of Antimicrobial Resistance Genes in Wastewater: A Pilot Study in Ghana Using the Diaxso DNA Extractor and PCR Platform
Presenter: Naa Shika Tettey
 - **41:** Assessing the Inhibitory Activity of Herbal Antimalarial Drugs in Ghanaian Community
Presenter: Monia Enyonam Honyo
 - **42:** Immune Responses to Malaria Crude Antigen by Children in Two Ecological Zones of Ghana
Presenter: Jaylyn Akwetea-Foli
 - **44:** *Plasmodium falciparum* Surfins as Potential Markers of Gametocyte Carriage
Presenter: Dorcas Gyamah Bredu
 - **46:** Antidepressant-like Effects of Hydroethanolic Leaf Extract of *Anopyxis klaineana* (Pierre) Engl. (Rhizophoraceae) in Mice
Presenter: Abigail Worts
 - **48:** Host Genetic Variants That Protect Against Clinical Malaria May Influence Asymptomatic Malaria Parasite Carriage
Presenter: Cecil Kwame Mfum Asa-Atiemo
 - **49:** Geographical Trend of *Plasmodium ovale* and *malariae* Infections in Suspected Malaria Patients in Ghana
Presenter: Elaine Asiwome Boadu
 - **51:** An Analysis of Public Sentiments Towards Health Directives During COVID-19
Presenter: Emmanuel Djaba
 - **58:** The Impact of Hepatitis B Co-Infection on T-Cell Responses in Virologically Suppressed HIV Patients on Antiretroviral Therapy in Ghana
Presenter: Abigail Pobe
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- **60:** Examining the Microbiological Safety of Artificial Eyelashes for Consumers
Presenter: Naomi Bosso
 - **61:** Validation of the *Plasmodium falciparum* 3D7 SYBR Green Growth Inhibition Assay of the Drug Discovery Project
Presenter: Festus Kojo Acquah
 - **62:** A Novel Usage of Alpha-synuclein as a Biomarker for Screening Parkinson's Disease: A Study at Komfo Anokye Teaching Hospital in Kumasi
Presenter: Yaw Osei
 - **66:** *Schistosoma haematobium* Infection Associated with Upregulation of sHLA-G and Increased Risk of Malaria
Presenter: Oscar Nii Otto Darko
 - **68:** Proteomic Profiling of Medium-sized Extracellular Vesicles in Malaria
Presenter: James Grant
 - **71:** Malaria Exposure Risk and Naturally Acquired Immunity Among Students from Southern and Northern Ghana
Presenter: Nana Akua Obiribea Koranteng
 - **73:** The Effect of Cyclooxygenase-2 Inhibitor, Celecoxib, on Multiple Organ Injuries Induced by Anti-Tuberculosis Drugs in Rats
Presenter: Jawcell Yeboah
 - **74:** Evaluation of the Wound Healing and Anti-Microbial Activity of the Young and Old Hydroalcoholic Leaf Extracts of *Vernonia amygdalina* Delile
Presenter: Michael Woode
 - **75:** Lisinopril's Protective Role Against Multi-Organ Toxicities Induced by Antitubercular Drugs in Rats
Presenter: Mavis Sebire
 - **76:** Seasonings and Human Health: Exploring Potential Threats and Risks
Presenter: Kate Afram
 - **79:** Hemozoin Causes Malaria Through the Activation of DNA Damage, p38 MAPK and Neurodegenerative Pathways in an in-Vitro Model of Cerebral Malaria (CM)
Presenter: Akua Afriyie Karikari
 - **80:** Viral Suppression Among People Living with HIV Within 12 Months of Antiretroviral Therapy in the Greater Accra Region of Ghana
Presenter: Sampson Kafui Djonor
 - **81:** Influence of Counselling on Status Disclosure and Viral Suppression Among People Living with HIV in Ghana
Presenter: Sampson Kafui Djonor
 - **82:** Ototoxic Effects of Antibiotics Given in Ghanaian Children
Presenter: Gideon Narteh Kwesi
 - **84:** Vikil 20 Suppresses the Proliferation of Prostate Cancer (PC-3) Cells and Quenches Free Radicals in Vitro
Presenter: Clement Tettey
 - **85:** High grade b-cell lymphoma with 11q aberration, neither burkitt lymphoma nor diffused large b-cell lymphoma, what the microenvironment tells us.
Presenter: Benjamin Ansah-Agyei
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