MeBoP

Middle Eastern Biology of Parasitism

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Kebbi State
Zamfara State
Katsina State
Kano State
Jigawa State
Yobe State
Borno State
Kaduna State
Bauchi State
Gombe State
Niger State
Adamawa State
Federal Capital Territory State
Plateau State
Kwara State
Oyo State
Nasarawa State
Taraba State
Osun State
Ekiti State
Kogi State
Benue State
Ogun State
Ondo State
Edo State
Enugu State
Lagos State
Anambra State
Ebonyi State
Cross River State
Delta State
Imo State
Abia State
Bayelsa State
Rivers State
Akwa Ibom State


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Mali
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Chad
Sudan
Yemen
Oman
Gulf of Aden
Burkina Faso
Guinea
Nigeria
Ethiopia
South Sudan
Ghana
Gulf of Guinea
Somalia
Kenya
Gabon
DR Congo
Tanzania
Angola
Zambia
Mozambique
Namibia
Zimbabwe
Botswana
Madagascar
South Africa

Overall Research Goal

Control of parasitic infections in Sub-Sahara African countries

Epidemiology, morbidity quantification and diagnostics

- Epidemiology of parasitic infections (schistosomiasis, malaria, trichomoniasis, filariasis)
- Conventional indirect diagnostic approaches and efficiency
- Molecular epidemiology of intermediate hosts of schistosomiasis in Nigeria and dynamics of *Schistosoma* transmission

Impact of co-infections on parasitic diseases severity

- Malaria and schistosomiasis and effects on susceptibility and diagnosis
- Malaria and schistosomiasis and effects on hematologic and renal-related disorder
- Interaction between malaria and hepatitis
- Interaction between enteroviruses and intestinal parasites

Drug discovery against parasitic diseases

- Indigenous plant materials against snails intermediate host of schistosomiasis
- Determination of efficacy of novel nanoparticulate drugs against snail hosts
- Potency of some novel nanomedicines against malaria and trematode parasites

Present and Future Research Directions

- Proteomics and diagnostics development for African-type schistosomiasis
  - Profiling of *Schistosoma* infected host serum for immunoreactive antigens
  - Proteome profiling in bladder pathology induced by *Schistosoma haematobium* infection
- Immunogenicity of nanovaccine
  - Adjuvanticity properties of curcumin on *Schistosoma* worm tegument protein in PLGA delivery system
  - Immunogenicity of SWA using *Moringa oleifera*-derived glycosides in polymeric nanoparticles delivery system

Expertise and resources available

Expertise

- Epidemiological data gathering
- Cell culturing
- ELISA
- Drug formulation, design and testing
- Data mining and analysis

Resource available

- Research field and biological samples

Expertise required for next line of research

- Bioinformatics for proteomes analysis
- Flow cytometric
- Gene cloning and expression
- Electron microscopy

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Some Research outputs from our lab

- Dauda, K., Busari, Z., Morenikeji, O., Afolayan, F., **Oyeyemi, O.,*** Meena, J., Sahu, D. and Panda A. (2017). Poly-D,L-lactic-co-glycolic acid-based artesunate nanoparticles; formulation, antimalarial and toxicity assessments. J Zhejiang Univ-Sci B (Biomed & Biotechnol), doi.org/10.1631/jzus.B1600389.2017
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Thank you

for

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audience