

SENIOR SCIENTIST

Summary

I am a biological scientist with a research background focused on biomedical sciences, parasitology, infectious diseases, molecular biology and assay development and standardization. I am results-oriented with seventeen years of experience in infectious diseases, including two years of field work and sample collection and eight years of postgraduate experience in academia and biotechnology. Accomplished in generating and applying new protocols and technologies, with expertise in data collection, study and analysis.

Experience

Senior Scientist

October 2011 to Current Abbott Laboratories - Concord , NH

- Conducted experiments to improve drug assay development and authentication.
- Demonstrated individual and team laboratory tests.
- Guaranteed all data met stringent quality control standards.
- Trained and supervised biologists in drug assays, fluorescent techniques, and data entry and statistical analysis.

Science Lecturer

July 2006 to May 2010 Amarillo College - Hereford , TX

- Developed and taught classroom courses in Biology and Chemistry.
- Lectured and communicated effectively with students from diverse backgrounds.
- Maintained thorough records of student attendance and grades.
- Maintained regularly-scheduled office hours to advise and assist students.
- Served as an Academic Advisor for 8-10 students each year.

Teaching Assistant

August 2004 to May 2005 Research Affiliates - Newport Beach , CA

- Biochemistry Department (Faculty of Medicine)

Researcher

January 1993 to August 2005 Amarillo College - Amarillo , TX

- Conducted experiments in a number of diagnostic methods for tropical diseases.
- Trained and supervised biological technicians and technologists.
- Created technical and research documents
- Drafted requests for proposals and statements of work.
- Conducted research in molecular biology and epidemiology.
- Collected and analyzed blood samples from patients.
- Presented quarterly status reports to supervisors and peer groups.

Teaching Assistant

August 1988 to May 1994 Amarillo College - Dumas , TX

- Biochemistry Department (Faculty of Medicine)

Teaching Assistant

August 1986 to July 1989 University Of Khartoum - City , STATE

- Zoology Department, Faculty of Science

Education

Doctor of Philosophy : Medical Biochemistry , 2004 University of Khartoum - City , Sudan

- A joint program in collaboration with the Institute of Cell, Animal and Population Biology, University of Edinburgh.
- Field work for one year collecting blood samples from malaria patients in Eastern Sudan.

Master of Science : Medical Biochemistry , 1994 University of Khartoum - City , Sudan

- Coursework in Biochemistry and Molecular Biology.
- Field work for over six months collecting blood samples from malaria patients in Eastern Sudan.

Bachelor of Science : Zoology , 1986 University of Khartoum - City , Sudan

- Graduated top of my class, with Honors.
- Minor in Chemistry
- Honors Dissertation: Study on the parasites of *Streptopelia senegalensis* and *S. decipiens* in the area around Khartoum, B.Sc Hons.,(Part

Publications

- Hartwig, C.L. **A. O. Ahmed**, R. A. Cooper and T. T. Stedman (2013). SYBR Green I-based parasite growth inhibition assay for measurement of antimalarial drug susceptibility in *Plasmodium falciparum*. METHODS IN MALARIA RESEARCH. Sixth Edition MR4 / ATCC
- **Abdel-Wahab AO**, Abdel-Muhsin A, Ali E, Suleiman S, Ahmed S, Walliker D and Babiker HA. Dynamics of gametocytes among *Plasmodium falciparum* clones in natural infections in an area of highly seasonal transmission. J Infect Dis 2002; 185:1838-1842.
- Menegon, M., Severini, C., Sannella, A., Paglia, M. G., Sangare, D., **Abdel-Wahab, A**., Abdel-Muhsin, A. A., Babiker, H., Walliker, D., and Alano, P. Genotyping of *Plasmodium falciparum* gametocytes by reverse transcriptase polymerase chain reaction. Mol Biochem Parasitol 2000; 111:153-161.
- Babiker HA, **Abdel-Wahab AO**, Ahmed S, Suleiman S, Ranford-Cartwright L, Carter R, Walliker D. Detection of low level *Plasmodium falciparum* gametocytes using reverse transcriptase polymerase chain reaction. Mol Biochem Parasitol 1999; 99: 143-148.

Presentations

- Multilateral Initiative on Malaria Conference Arusha, Tanzania. 2002
- Malaria Meeting of the British Society for Parasitology Oxford, UK. 2000
- Malaria Meeting of the British Society for Parasitology Edinburgh, Scotland. 1998
- Malaria Meeting of the British Society for Parasitology Glasgow, Scotland. 1996
- The Second Scientific Conference, National Centre for Research Khartoum, Sudan. 1995
- International Symposium on Water- Borne Diseases, Ministry of Health, Central State, Wad Medani, Sudan. 1994
- The First Scientific Conference, National Centre for Research Khartoum, Sudan. 1993

Research Skills

- **Laboratory Skills** : Expert in molecular and biochemical techniques, and experimental design: Gel electrophoresis, PCR, RT-PCR, western blotting, nucleic acid isolation, genotyping, IFA, protein purification, spectrophotometry, chromatography (HPLC) drug assays (development and optimization), solutions / media preparation, and aseptic techniques and culturing and cloning parasites.
- **Research & Analysis**: Skilled at conducting research both independently as part of research teams, ensuring consistent adherence to study and lab protocols, safety requirements, and best practices. Gather and analyze data using Excel and bioinformatics tools, SPSS and GraphPad Prism; evaluate results and write academic papers for publication and presentation.
- **Relationship Building** : Cultivate relationships with diverse colleagues, including Principal Investigators, research assistants, fellow biologists and scientists. Communicate effectively and convey complex information in a clear and articulate manner to eliminate misunderstandings and encourage collaboration.
- **Computer Skills**: Proficient in using Windows, Mac, Word, Excel, PowerPoint, Blast2GO, National Center for Biotechnology Information (NCBI) Database, and SpectraMax Pro. Quickly learn new software, systems, equipment, protocols, and techniques.

Awards

- Academic Achievement Award - University Prize for Best Results, 1986
- WHO Fellowship Recipient through a Special Program for Research and Training in Tropical Diseases (TDR), 1998.