CURRICULUM VITAE

Personal details

Name: Mustafa Idris Elbashir Ali

Date of Birth: 06.04.1954

Place of Birth: Wadel Habashi, River Nile State, Sudan

Nationality: Sudanese

Marital Status: Married, a father of four children

Present Post: Professor of Biochemistry, Faculty of Medicine,

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Education

1961-1965	Wad Elhabashi Primary School
1966 -1970	Hajjar Eltair Intermediate School
1971-1973	Atbra High Secondary School
1974 -1980	Faculty of Medicine, University of Khartoum
1983-1984	Department of Biochemistry, Faculty of Medicine, University of Khartoum
1985-1991	Department of Medical and Physiological
	Chemistry, Faculty of Medicine, University of Lund,
	Sweden

Qualifications

- 1 Bachelor of Medicine and Surgery MBBS University of Khartoum 1980.
- 2 Doctor of Medical Sciences in Medical Biochemistry (PhD), May 1991, Faculty of Medicine, University of Lund, Sweden.
- 3 Nordic Diploma course in Tropical Medicine, Huddinge Hospital, Karolinska Institute, Stockholm, Sweden, Dec 1997.

Professional Career

- 1 Internship at Khartoum Teaching Hospital 1980-1981.

 Neurosurgery 3 months, Internal Medicine 3 months, Obstetrics and gynecology 3 months, and General surgery, 3 months.
- 2 Medical Officer, Children Emergency Hospital, Khartoum Sudan 1982-1983.
- 3 Teaching assistant, Department of Biochemistry, Faculty of Medicine, University of Khartoum-Sudan 1983-1984.
- 4 Teaching and Research Assistant, Department of Medical and Physiological Chemistry, Faculty of Medicine, University of Lund, Sweden (1985-1991).
- 5 Assistant Professor, Department of Biochemistry, Faculty of Medicine, University of Khartoum Sept. 1991- Dec.1996.
- 6 Associate Professor of Medical Biochemistry, Department of Biochemistry, Faculty of Medicine, University of Khartoum Dec. 1996.-Jul.2004.
- 7 Full Professor of Medical Biochemistry, Faculty of Medicine, University of Khartoum, since Jul 2004.
- 8 Head, Department of Biochemistry, Faculty of Medicine, University of Khartoum, Sudan Jan. 1995.-Sep.2005.

- 9 Director, Directorate of Scientific Research and Cultural Relations, University of Khartoum, Sep 2005- Mar 2007
- 10 Dean, Faculty of Medicine, University of Khartoum, Mar2007.-Apr.2009.
- 11 Vice Chancellor, University of Khartoum April 2009 Feb 2011
- 12 Assistant Secretary General, Association of Arab Universities Jan 2012 until now.

Academic and Administrative Activities in the University of Khartoum:

- 1 Examination Secretary with duties of supervising all administrative aspects of examinations held by the Department of Biochemistry, Faculty of Medicine, University of Khartoum 1991-1993
- 2 Postgraduate academic secretary, with duties of organizing seminars, Journal clubs and lectures at the Department of Biochemistry, faculty of Medicine, University of Khartoum, Sudan 1992-1995
- 3 Head, Department of Biochemistry, Faculty of Medicine, University of Khartoum from Jan 1995 – Sep 2005.
- 4 Member of the Faculty Board of Medicine Curriculum- Committee, 1995 until now.
- 5 Member of the Faculty of Medicine Research Board since 1995.

- 6 Member of the Faculty Board of the Faculty of Medicine from 1995 until now.
- 7 Member of the University of Khartoum Senate from 1995 until now.
- 8 Member of the Editorial Board of the University of Khartoum Medical Journal since Jan. 2004.

Contribution to the promotion of teaching and evaluation

- 1 I headed a committee for revision, updating and breaking down the curriculum of Biochemistry in the period April –Oct 2000. We produced a document praised by several external reviewers and examiners.
- I am teaching several courses in Medical Biochemistry to undergraduate medical, dental and pharmacy students at the University of Khartoum, including chemistry of biomolecules, biochemical techniques, metabolism of carbohydrates, lipids, amino acids, integration and hormonal regulation of mammalian metabolism, immunochemistry and genetics, since 1991.
- 3 I am teaching advanced courses to postgraduate students at the Department of Biochemistry in preparation for MSc by course, MSc by research or PhD, from 1991 until now. These are:
 - a Biochemistry courses including biochemical techniques, integration and hormonal regulation of mammalian metabolism, special tissue metabolism; the liver, the brain, the adipose

tissue, the red blood cell, the muscles, cancer biochemistry and metabolism of xenobiotics.

- b Immunology courses including cells of the immune system, innate and adaptive immune responses, immunoglobulins structure and function, diversity of immunoglobulins and T cell receptors, major histocombatibility complex molecules, complement pathways, cytokines classes and functions, molecular and cellular cooperation in the immune response, immunity to parasitic diseases with special reference to the malaria parasite.
- Molecular Biology courses including replication, transcription,
 control of gene expression, and recombinant DNA technology.

Participation in Courses, Workshops & Scientific Meetings:

A. In preparation for PhD

Gene Manipulation Techniques Course, August 1986. This was a 10 weeks full-time course at the Department of Microbiology, University of Lund, Sweden. The course involved extraction of DNA and mRNA from tissues, cloning and expression of genes prepared from DNA, or cDNA prepared by reverse transcriptase. It involved also practical on DNA hybridization and sequencing techniques.

- 2 Mechanism of Insulin Action: an International Conference where the hormonal signal transduction for insulin was discussed in detail, Falsterbo, Sweden June 1987.
- 3 Hormone Receptor Preparation and Characterization Techniques, 4 weeks course. It involved preparation of receptors from tissue homogenate using various biochemical techniques with especial emphasis on growth hormone receptor from rat liver, Department of Medical & Physiological Chemistry, University of Lund Sept. 1987.
- 4 Hormone Sensitive Lipase Characterization, International Conference, Falsterbo, Sweden June 1988.
- Monoclonal Antibodies Applications and Techniques: two weeks course with lectures and practical on monoclonal antibodies preparation and uses, Department of Immunology, Stockholm, Sweden Nov. 1988.

B. Attendance of courses, workshops and Scientific Meetings after PhD

Malaria Parasite Culture and Metabolic labeling of parasite molecules: two months course where I learned how to make long term malaria parasite cultures and studied some of the metabolic activity in the growing parasite by addition of radiolabeled metabolites to the culture media, Department of Medical Parasitology, University of Copenhagen, Denmark, Feb-April 1994.

- 2 Scientific Meeting of European Commission-supported malaria research projects, Heidelberg Germany Sep. 1999. As the Sudanese coordinator I presented a report on the project entitled "Immunity to Plasmodium falciparum malaria in African villages: longitudinal immunological, epidemiological and parasite genetic studies" on behalf of the Department of Biochemistry, Faculty of Medicine, University of Khartoum. The European Commission supported this project with \$ 617000 US Dollars.
- African Malaria Vaccine Testing Network (AMVTN) workshop.
 Venue: Bagamoyo, Tanzania, 28 February. 2000 1 March 2000.
 The workshop was on Good Clinical Practice and Clinical Trials
 Methodology. It covered important issues such as history, laws,
 regulations, ethics of clinical and field research, preparation of
 research protocols, informed consent, monitoring of longitudinal
 studies, documentation of findings of clinical field research etc.
- 4 Protocol Development Workshop on anti-malarial combination therapy, organized by WHO/TDR/ Drug Resistance and Polices Department, Geneva. Venue: Bamako, Mali, 22-26 May 2000. The workshop was a gathering of scientists involved in research on malaria chemotherapy, from Africa and the North. It was one of WHO headquarters initiatives to face the growing threat of antimalarial drug resistance globally and especially in Africa where the first line drug (chloroquine) has shown failure in many countries. Different protocols on antimalarial combination therapy

were discussed in addition to the potential sites for pilot studies. Following that workshop we carried out a WHO supported study on malaria combination therapy in eastern Sudan (Gadarif and New Halfa) which resulted in several publications in the list below.

- Memorial Institute for Medical Research, University of Ghana, Ghana 26 Nov 3 Dec. 2000 organized by Multilaterial Initiative on Malaria in Africa (MIM /TDR/WHO). The participants were African scientists and their associates who received grants from TDR/WHO and involved in malaria immunology and pathogenesis research. The workshop involved lectures, presentations and laboratory work on advanced immunological techniques including ELISPOT and FACS. In the same meeting we formed the MIMPAC (Malaria Immunology and Pathogenesis Consortium). I am a member of the steering committee of the consortium since then.
- Meeting PIs of MIM/TDR/WHO supported projects on malaria Harare, Zimbabwe, March 2001. The meeting was for the MIM Task Force to evaluate the progress reports of MIM supported projects on malaria in Africa. In this meeting I presented the first report of our research on malaria immunology and pathogenesis which received support from MIM/TDR/WHO ((\$ 60000 US Dollars). The report was accepted and renewal support was approved with \$70000 US Dollars.

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- MIMPAC workshop on development of complementary research proposals in the area of malaria immunology and pathogenesis, Lambarene, Gabon, 1- 6 Oct 2001. The workshop was funded by the MIM/TDR/WHO. Myself, and other principle investigators composing the MIMPAC delivered oral presentations of the suggested proposals. The workshop emphasized the importance of complementarily of the research carried by the different groups in the consortium, harmonization of laboratory protocols, exchange of students training, design of relevant workshops, and maximum usability of available capital equipments in each partner's laboratories. Two of proposals developed by the consortium in this workshop (exchange of student training and organization of two workshops) were approved for support by MIM/TDR/WHO.
- Genomics and public health policy course organized by the African Centre for Technology studies (ACTS) and the Joint Centre for Bioethics, University of Toronto, Canada. Venue: Nairobi, 4-8 Mars 2002. The course covered the current status and implications of health genomics/biotechnology, and provided information relevant to public policy on health genomic/biotechnology. It also provided frameworks for analyzing and debating the policy issues and related ethical questions in health genomics/biotechnology, and it provided participants with knowledge to understand, anticipate and possibly influence the legal and regulatory frameworks under which health biotechnology industries will operate. The course

resulted in the formation of an African Forum of Genomics and Biotechnology (AFGB) through which the participants are very well connected and we getting through this forum the latest information in the area of genomics and public health.

- The first African Health leadership workshop, 7-18 Oct 2002, Arusha, Tanzania. The workshop was organized by the Multilateral Initiative on Malaria in Africa (MIM/TDR/WHO) and the African Malaria Network Trust (AMANET). The participants were leaders of malaria research in Africa. The workshop addressed the issue of management and leadership skills through a program of training, mentorship, and development of a virtual network of malaria research institutions in Africa. The training focused on the skills and attitudes required for effective leadership of a research institution.
- 10 The Task Force on Malaria Research Capability Strengthening in Africa (MIM/TDR/WHO) meeting, 10 14 Mars 2003, Maputo, Mozambique. Oral presentation: progress report on the WHO funded project entitled "Description of the clinical features and immuno-pathology of severe malaria in area of unstable transmission in Sudan". The report was accepted by the Task Force and extension of the project was approved.
- 11 MIMPAC Steering Committee meeting 19-22 February 2004,
 Tubingen, Germany. The meeting was supported by

MIM/TDR/WHO. Reports on the progress of research were presented and more collaboration was discussed.

Major Research Projects and Grants

Introduction

The first three projects in the list below were executed during my PhD studies. The rest of the projects are mainly focused on therapeutics, susceptibility to infection, and immunopathology of falciparum malaria in Sudan. Also, I am involved in research dealing with sickle cell disease; viral infections. Thus, the projects from 4 to 10 constitute my ongoing research activities from 1992 until now, and involve many collaborators at the national and international levels. Our collaborators include scientists from Sweden, Denmark, Germany, Netherland, England, and USA as shown in the list of publications below.

1- Driven by personal interest in biochemistry and immunology I had the choice to participate in the design of the PhD project at the Department of Physiological Chemistry, Faculty of Medicine, University of Lund, Sweden. The University of Lund granted me fully sponsored scholarship for PhD degree in Medical Biochemistry. After thorough search in the literature and discussions with my supervisor it was decided that the project would be "characterization of the human growth hormone receptor using monoclonal anti-idiotypic antibodies".

- 2- Immunoglobulin-binding bacterial proteins (protein G and protein L) as detectors of specific antibody response. This project was carried out to establish and optimize a sensitive and highly specific screening method for monoclonal antibodies generated against growth hormone receptor. This project was supported by grants from the Swedish Medical Research Council (project no. 7144 and 7480), Kung Gustav V:s 80ars Foundation, the Faculty of Medicine, University of Lund, the Swedish Medical Association, the Foundation of Osterlund, Johansson and Koch, High Tech Receptor. AB, Malmo, Sweden, and the National Swedish Board for Technical Development.
- 3- Production and Characterization of monoclonal anti-idiotypic antibodies to the pituitary growth hormone receptor. This project was Supported by grants from the Swedish Medical Research council (grant no. B-88-13X-0828-01A), the Faculty of Medicine, University of Lund, Kabi Vitrum AB, the Swedish Medical Society, the Foundation of Magnus Bergvall, the Foundation of Lars Hierta and the foundation of Albert Pahlsson.
- 4- Acute phase proteins and susceptibility to malaria infection with special emphasis on haptoglobin. We have been able to show association between haptoglobin phenotype (1-1) and susceptibility to falciparum malaria. Through this project and under my supervision several students obtained MSc and PhD degrees and resulted in several publications in the list below. The project

- received partial support from UNDP/World Bank/WHO Special programme for Research and Training in Tropical Diseases (TDR).
- 5- Antimalarial drug efficacy and resistance. This project had been going on under my supervision in eastern Sudan in collaboration with New Halfa and Gadarif hospitals. It involved several MSc and PhD students. It resulted in several publications in the list below. It received partial support from EMRO/WHO and from DAAD.
- 6- Epidemiology of malaria during pregnancy in an area of seasonal and unstable malaria transmission in New Halfa, Eastern Sudan. It was initiated by me in collaboration with Professor Ishag Adam, Gynecologist, who worked in New Halfa hospital and involved several MSc and PhD students. It resulted in several publications in the list below. It received partial support from EMRO/WHO.
- 7- I was the Sudanese coordinator of the project entitled "Immunity to Plasmodium falciparum malaria in African villages: longitudinal immunological, epidemiological and parasite genetic studies" The European Commission supported this project with \$ 617000 US Dollars. It was collaborative research between two institutes from Europe (Institute of Cell, Animal and Population Biology, University of Edinburgh, U.K, and Institute of Medical Microbiology and Immunology, University of Copenhagen, Denmark); two African institutes (The Department of Biochemistry, Faculty of Medicine, University of Khartoum, and the Noguchi Memorial Institute for

Medical Research, Accra, Ghana). Many publications were produced from this project and several students were trained to the MSc and PhD level (Dr. Hayder Ahmed Giha and Dr. Gamila Ibrahim Ahmed, both are now PhD holders and members of the department staff, in addition to Dr. Amel Awad Hamad from the National Laboratory).

- 8- I was the principle Investigator of a project entitled "Description of the clinical features and immunopathology of severe Malaria in area of unstable malaria transmission in Sudan". It was a three year collaborative project supported by the Multilateral Initiative on Malaria in Africa, Tropical Disease Research, World Health Organization (MIM/TDR/WHO). It was supported by a total of \$ 185000 US Dollars. The study was performed in Gadarif and New Halfa, Eastern Sudan, Oct 2000 -Oct 2003. Three graduate students at the Department of Biochemistry (teaching assistants) one PhD student from El-Imam Elmahadi University, one student from Juba University, one student from Africa International University were involved in this project as part of their PhD programme under my supervision. Several publications have been produced from this project as shown in the list below.
- 9- Effect of Omega3-fatty acid supplementation in patients with sickle cell anemia. It is a longitudinal study involving more than 200 patients of sickle cell disease whom we follow up regularly at Gaafar Ibnuof Children Hospital in Sudan. It is carried in

collaboration with the Institute of Brain chemistry and Human Nutrition, London Metropolitan University, London, UK It involved several graduate students to the levels of MSc and PhD with very promising results to the patient, graduate training and transfer of technology (see the list of publications)

10- I am also involved in a project dealing with recent sporadic outbreaks of viral hemorrhagic fever. It involves several collaborators from the University of Khartoum and USA. We confirmed the presence Crimean-Congo hemorrhagic fever, and rift valley fever virus. It is clinical, epidemiological and genetic study (see the list of publications below)

Supervision of Postgraduate Students

More than forty students obtained MSc degree and more than twenty students obtained PhD degree under my supervision through involvement in the above research projects (see the list of publication below).

Contribution to relevant institutions and to the profession

- 1 Teaching Medical Biochemistry, as part-time teacher, to undergraduate medical students at Universities of Juba, Bahr Elghazal, Shendi, Kassala, Kordofan, Nilein, Dungula and University of Medical Science and Technology, since 1993.
- 2 External examiner on several occasions for 2nd MBBS at the faculty of medicine of Juba, Shendi, Kasala, Omdurman Elislamia, Bahr Elghzal, Nilein and Kordofan since 1992.
- 3 External examiner for several PhD theses at the University of Gazera, Nilein, Sanaa...
- 4 Member of committees for design of curricula for the faculties of medicine at the Universities of Kordofan, Nilein, Gadarif, Rabat, and Dungula since 1996.
- Visiting lecturer of Biochemistry for three months at the University of Science and Technology, Sanna, Yemen, 1997.
- 6 President of the Sudanese Red Crescent Society June 2000-Oct 2002. I represented the society in many national, regional and international conferences (volunteer).
- 7 Vice president of the Health Commission of International Federation of the Red Cross and Red Crescent (IFRCS), Geneva, Switzerland, 2001 2002. I participated in the development of the health plan for the federation which was mainly directed towards

control of major diseases in the third world, HIV/AID, malaria, tuberculosis, diarrheal diseases.

- Member of Health Task Force for East Africa Region, affiliated to the Regional Office of the International Federation of the Red Cross and Red Crescent Societies, Nairobi, Kenya 2001 2002. I participated in the design of health plan adopted by the Red Cross and Red Crescent Societies in the region which was mainly focused on HIV/AIDS and Malaria.
- 9 Member of the steering committee of the Malaria Immunology and Pathogenesis Consortium in Africa (MIMPAC), since 2000. It is a network of African scientists sharing a common interest in capacity building and research focused on malaria immunology and pathogenesis in Africa with the goal to increase awareness and support of research in immunology and pathology of malaria and to promote the utilization of its research finding.
- 10 Member of the African Malaria Network Trust (AMANET), since 2002. It is an African malaria network based in Daresalam, Tanzania. It has been able to mount several short-term training workshops in order to build capacity essential for evaluating malaria vaccine candidates meeting international quality standards. It organized workshops in health research ethics, good clinical practice, data management, in intervention trials, molecular

biology and immunology......It receives support from many international donor organizations (www.amanet-trust.org)

Publications

- Osman, HAM, Eltom, KH, Musa, NO, Bilal, NM, **Elbashir, MI** and Aradaib, IE Development and evaluation of loop-mediated isothermal amplification assay for detection of Crimean Congo hemorrhagic fever virus in Sudan *J Viro Met 190 (2013) 4-10*.
- 2 Elagib, AA, Mirgani, HA, Shamsaldien, NM, Khir, FM, Attallah, BM, and Elbashir, MI Is resistance to *P. Falciparum* infection in sickle cell trait (AS) individuals related to the presence of high frequencies of hap[toglobin Hp2-1? *Am J Sci Ind Res 2013, 4(2): 253-256.*
- 3 Aradaib IE, Erickson BR, Elageb RM, Khristova ML, Carroll SA, Elkhidir IM, Karsany ME, Karrar AE, **Elbashir MI**, Nichol ST Rift valley Fever, Sudan, 2007 and 2010. *Emerg Infect Dis*. 2013;**19**(2):246-53
- 4 Daak AA, Ghebremeskel K, Hassan Z, Attallah B, Azan HH, Elbashir MI, Crawford M. Effect of omega-3 (n-3) fatty acid supplementation in patients with sickle cell anemia: randomized, double-blind, placebo-controlled trial. *Am J Clin Nutr.* 2013; 97(1):37-44.

- 5 Adam I, Ehassan EM, Mohmmed AA, Salih MM, **Elbashir MI**.

 Decreased susceptibility to placental malaria in anaemic women in an area with unstable malaria transmission in central Sudan.

 Pathog Glob Health. 2012;**106** (2):118-21
- 6 Adam MB, Adam GK, Rayis DA, **Elbashir MI**, Adam I Thrombocytopenia in pregnant women with *Plasmodium falciparum* malaria in an area of unstable malaria transmission in eastern Sudan. BMC *Clin Pathol.* 2012; **12**(1):10.
- 7 Saad AA, Mohamed OE, Ali AA, Bashir AM, Ali NI, **Elbashir MI**, Adam I. Acute-phase proteins in pregnant Sudanese women with severe Plasmodium falciparum malaria. *Trans R Soc Trop Med Hyg.* 2012;**106**(9):570-2
- 8 Bueno AA, Ghebremeskel K, Bakheit KH, **Elbashir MI**, Adam I. Dimethyl acetals, an indirect marker of the endogenous antioxidant plasmalogen level, are reduced in blood lipids of Sudanese pre-eclamptic subjects whose background diet is high in carbohydrate. *J Obstet Gynaecol.* 2012; **32** (3):241-6
- 9 Elbashir HM, Salih MM, Elhassan EM, Mohmmed AA, **Elbashir MI**, Adam I. Polymerase chain reaction and histology in diagnosis of placental malaria in an area of unstable malaria transmission in Central Sudan. *Diagn Pathol.* 2011; **6**:128

- 10 Daak AA, Ghebremeskel K, **Elbashir MI**, Bakhita A, Hassan Z, Crawford MA. Hydroxyurea therapy mobilises arachidonic Acid from inner cell membrane aminophospholipids in patients with homozygous sickle cell disease. *J Lipids*. 2011; **2011**:718014.
- 11 Salih MM, Mohammed AH, Mohmmed AA, Adam GK, **Elbashir MI**, Adam I. Monocytes and macrophages and placental malaria infections in an area of unstable malaria transmission in eastern Sudan. *Diagn Pathol.* 2011;**6**:83
- 12 Adam I, Elhassan EM, Mohmmed AA, Salih MM, **Elbashir MI.**Malaria and pre-eclampsia in an area with unstable malaria transmission in Central Sudan. *Malar J.* 2011;**10**:258
- 13 Ali AA, Rayis DA, Abdallah TM, **Elbashir MI**, Adam I Severe anaemia is associated with a higher risk for preeclampsia and poor perinatal outcomes in Kassala hospital, eastern Sudan. *BMC Res Notes*. 2011;**4**:311
- 14 Ibrahim EA, Kheir MM, Elhardello OA, Almahi WA, Ali NI, Elbashir MI, Ishag A. Cortisol and uncomplicated Plasmodium falciparum malaria in an area of unstable malaria transmission in eastern Sudan. Asian Pac J Trop Med. 2011; 4 (2):146-7.
- 15 Elata AT, Karsany MS, Elageb RM, Hussain MA, Eltom KH, Elbashir MI, Aradaib IE A nosocomial transmission of crimean-

- congo hemorrhagic fever to an attending physician in North Kordufan, Sudan. *Virol J.* 2011;**8:**303
- 16 Ali AA, Elhassan EM, Magzoub MM, **Elbashir MI**, Adam I. Hypoglycaemia and severe Plasmodium falciparum malaria among pregnant Sudanese women in an area characterized by unstable malaria transmission. *Parasit Vectors*. 2011;**4**:88
- 17 Eltahir EM, El Ghazali G, A-Elgadir TM, A-Elbasit IE, **Elbashir MI**, Giha HA Raised plasma insulin level and homeostasis model assessment (HOMA) score in cerebral malaria: evidence for insulin resistance and marker of virulence. *Acta Biochim Pol.* 2010;**57**(4):513-20
- 18 Mirghani HA, Eltahir HG, A-Elgadir TM, Mirghani YA, **Elbashir MI**, Adam I. Cytokine profiles in children with severe Plasmodium falciparum malaria in an area of unstable malaria transmission in central Sudan. *J Trop Pediatr.* 2011;**57**(5):392-5
- 19 Saad AA, Ahmed NG, Osman OS, Al-Basheer AA, Hamad A, Deborggraeve S, Büscher P, Schoone GJ, Schallig HD, Laurent T, Haleem A, Osman OF, Eltom AM, Elbashir MI, El-Safi S. Diagnostic accuracy of the Leishmania OligoC-TesT and NASBA-Oligochromatography for diagnosis of leishmaniasis in Sudan. *PLoS Negl Trop Dis.* 2010; **4**(8):e776.

- 20 Nyuar KB, Min Y, Ghebremeskel K, Khalil AK, **Elbashir MI**, Cawford MAMilk of northern Sudanese mothers whose traditional diet is high in carbohydrate contains low docosahexaenoic acid. *Acta Paediatr.* 2010; **99**(12):1824-7.
- 21 Mohamed AA, Ali AA, Ali NI, Abusalama EH, Elbashir MI, Adam I. Zinc, parity, infection, and severe anemia among pregnant women in Kassla, eastern Sudan. *Biol Trace Elem Res.* 2011;140(3):284-90
- 22 Bakheit KH, Ghebremeskel K, Pol K, **Elbashir MI**, Adam I. Erythrocyte omega-3 and omega-6 fatty acids profile in Sudanese women with pre-eclampsia. *J Obstet Gynaecol.* 2010; **30**(2):151-4.
- 23 Bakheit KH, Ghebremeskel K, Zaiger G, **Elbashir MI**, Adam IErythrocyte antioxidant enzymes and plasma antioxidant vitamins in Sudanese women with pre-eclampsia. *J Obstet Gynaecol*. 2010; **30** (2):147-50.
- 24 Bakheit KH, Bayoumi NK, Eltom AM, Elbashir MI, Adam I.
 Cytokines profiles in Sudanese women with preeclampsia.
 Hypertens Pregnancy. 2009; 28(2):224-9
- 25 Abdelrahim II, Mahgoub HM, Mohamed AA, Ali NI, **Elbashir MI**, Adam I. Anaemia, folate, zinc and copper deficiencies among adolescent schoolgirls in eastern Sudan. *Biol Trace Elem Res.* 2009;**132** (1-3):60-6.

- 26 Abdelrahim II, Adam GK, Mohmmed AA, Salih MM, Ali NI, Elbashier MI, Adam I. Anaemia, folate and vitamin B12 deficiency among pregnant women in an area of unstable malaria transmission in eastern Sudan. *Trans R Soc Trop Med Hyg.* 2009 103(5):493-
- 27 Bayoumi NK, Elhassan EM, **Elbashir MI**, Adam I. Cortisol, prolactin, cytokines and the susceptibility of pregnant Sudanese women to Plasmodium falciparum malaria. *Ann Trop Med Parasitol.* 2009; **103** (2):111-7.
- 28 Bayoumi NK, Bakhet KH, Mohmmed AA, Eltom AM, **Elbashir MI,**Mavoungou E, Adam I Cytokine Profiles in Peripheral, Placental
 and Cord Blood in an Area of Unstable Malaria Transmission in
 Eastern Sudan. *J Trop Pediatr.* 2009, **55** (4): 233-237
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- paradigm for a simplified severity scoring *Eur J. Clin Microbiol Infect Dis* 2008; **27** (8): 725-732.
- 31 A-Elgadir TM, **Elbashir MI**, Berzins K, Masuadi EM, A-Elbasit IE, ElGhazali G, Giha HA. The profile of IgG-antibody response against merozoite surface proteins 1 and 2 in severe *Plasmodium falciparum* malaria in Eastern Sudan. *Parasitol Res.* 2008;102(3):401-9
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- 35 Osman ME, Mockenhaupt FP, Bienzle U, **Elbashir MI**, Giha HA. Field-based evidence for linkage of mutations associated with chloroquine (pfcrt/pfmdr1) and sulfadoxine-pyrimethamine (pfdhfr/pfdhps) resistance and for the fitness cost of multiple mutations in *P. falciparum*. *Infect Genet Evol.* 2007; **7**(1):52-9.
- 36 Abdelrahim II, Adam I, Elghazali G, Gustafsson LL, **Elbashir MI,**Mirghani RA. Pharmacokinetics of quinine and its metabolites in pregnant Sudanese women with uncomplicated *Plasmodium* falciparum malaria. *J Clin Pharm Ther.* 2007; **32**(1):15-9.
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- 38 Himeidan YE, Hamid EE, Thalib L, **Elbashir MI,** Adam I. Climatic variables and transmission of falciparum malaria in New Halfa, eastern Sudan. *East Mediterr Health J.* 2007; **13**(1):17-24.
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 Genetic fingerprints of parasites causing severe malaria in a

- setting of low transmission in Sudan. *J Mol Microbiol Biotechnol.* 2007; **13** (1-3):89-95.
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 Biochem J. 1990;266(2):467-74

Awards

I was awarded the top anual national prize in Sudan (Elshaheed Elzubair prize) in 2005 for my research on malaria. Our research group could confirm the malaria parasite resistanse to chloroquine which was used as first line drug for treatment of falciparum malaria

Also, myself and three others translated the well known biochemistry text book (Harper) in 2001. We were offered the prize of the best scientific book translated in Arabic language in the year 2001. The prize was offered by the Kuwait Foundation for the Advancement of Sciences.

Journal Referee

I am the Chief Editor of the Journal of Association of Arab Universities and I am acting as referee for several journals in the fields of tropical medicine and biochemistry including Am J Trop Med Hygei, Acta Tropica, Malaria Journal....

Participation and presentations in Conferences

- 1 Ethics in Higher Education and Scientific Research One Day Symposium, The Arab Academy for Science and Technology and Sea Transport, Alexandria, Egypt 28th Mars 2013, I represented Association of Arab Universities and delivered a talk in the opening ceremony.
- 2 Launch of the EFA Global Monitoring Report 2012 "youth and skills: Putting education to Work" Arabic Version, Cairo, 1st April 2013). I represented the association of Arab Universities and participated in the discussions and final resolutions.
- The International Higher Education Conference in the Arab World-Future Horizons, Gaza, Palastine, 15-18 Jan 2013, I represented Association of Arab Universities and delivered a talk in the opening ceremony.
- 4 Conference of Arab Expatriate scientists, under the title "When Arab Minds Integrate" Cairo, 19-20 December 2012, The league of Arab States in collaboration with the Society for Advancing Science and Technology in the Arab World (SASTA) I represented the association of Arab Universities and participated in the discussions and final resolutions.

- 5 International Conference of NGOs/ UNESCO Headquarters, 12-14
 December 2012 under the title: Reconciling Diversity and
 Universality, I represented the association of Arab Universities
- Arab Malaysian Global Higher Education Summit, Leadership in the Islamic Higher Education Institutions in the Era of Globalization 4-5 Oct 2012, oral presentation entitled: Role of higher education in restoration of the leading role of Islamic Ummah in the progress of knowledge today
- 7 The First International Conference on Role of Open and Distant Learning on Development, Bani Sweif University, Egypt, 15- 16 May2012, I represented the Association of Arab Universities and addressed the opening ceremony
- 8 Casemix System in health services workshop. It was a two days workshop in collaboration with United Nations University, Malaysia, held in Amman, Jordan 18-19 April 2012, I was the major coordinator and delivered oral presentation entitled: *Casemix* system for quality and efficiency in health services
- 9 The Symposium on Environmental Problems in the Arab World:
 Meeting Challenges of Sustainable Development; 26-28 February
 Muscat Sultanate of Oman, I represented the Association of Arab
 universities and addressed the opening ceremony.
- 10 A holistic Approach to Achieve Quality in Higher Education, two days workshop 11-12 Jan 2012 organized in collaboration with the

- British Council, Amman, Jordan. I participated in preparations and attended the sessions.
- 11 The Benzon Symposium, number 50 under the title, "The Lipocalin Protein Superfamily" conference, 24 28 August 2003, Copenhagen, Denmark. Poster presentation under the title: Human neutrophil lipocalin: a specific marker for neutrophil activation in severe *Plasmodium falciparum* malaria.
- 12 Endemic and Infectious Diseases in Sudan Conference, 5 8 May 2003 Khartoum, Sudan. Oral presentation entitled: "The history of malaria research in the Sudan, major achievements and challenges".
- 13 The third MIM Pan-African Malaria Conference, 17-22 Nov 2002, Arusha, Tanzania. Oral presentation: Comparison of intramuscular artemether with intravenous quinine in the treatment of severe malaria in Sudan.
- 14 International AID Conference August 2002 Barcelona, Spain. Oral presentation: Role of NGOs leadership in raising awareness of the public against AIDS.
- 15 11th International Congress of Immunology, Stockholm, 22-27 July 2001. I delivered oral presentation under the title: "Binding of human haptoglobin to antigen preparation from *Plasmodium falciparum*". The abstract was published as a supplement to the

Scandinavian Journal of Immunology, Vol 54, Supp1, Jul/August (2001), 129.

- 16 Annual Sudanese Sudanese Society of Pathology and Microbiology Conference, Khartoum 27-29 Mars 2001. I delivered oral presentation under the title "In Sudan: Chloroquine resistance is worsening and quinine resistance is emerging".
- Multilateral Initiative on Malaria in African Conference, Durban, South Africa 14 – 19 March 1999. Oral presentation: <u>Elbashir M I</u>. Association of the haptoglobin phenotype (1-1) with falciparum malaria in Sudan. *Proceedings of MIM African Malaria Conference*, (1999), C-58.

Books

- 1- Detection of antibody response with immunoglobulin-binding bacterial proteins and generation of monoclonal antibodies to the growth hormone receptor. PhD thesis passed in May 1991, Faculty of Medicine, University of Lund, Sweden.
- 2- Translation of five chapters from Harper Biochemistry, the 24th edition.2001, MTC, Damascus. It is the main reference text book for medical students in many of the medical schools globally including our school. The translation was a collaborative work which involved colleagues from Syria and Sudan. The book won the prize of the best scientific book translated to Arabic language in the year 2001 from the Kuwait Foundation for the Advancement of Sciences.

3- Mustafa Idris Elbashir and Abdel Muhsin Abdel Gadir Abdel Muhsin.

Molecular biology for medical students: laboratory manual (2004), UMST

Printing Press. It is about fifty pages manual explaining in details

protocols for performing practical on molecular biology including

extraction of DNA and RNA, DNA sequencing, determination of

mutations, amplification of DNA...etc... It has been officially adopted by at

least one medical school in the Sudan.