

CURRICULUM VITAE

**Professor Eltahir Awad Gasim Khalil,
*MBBS (Khartoum); LRCP; MRCS; FRCPath.***

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CURRICULUM VITAE

Name: *Eltahir Awad Gasim KHALIL*

Nationality: *Sudanese.*

Marital Status: *Married.*

Date and Place of birth *Khartoum*

MBBS Graduation : *Graduated in the Faculty of Medicine,
University of Khartoum, Sudan -
(04 May 1981)*

Professional Certificates:

- *MBBS. (University of Khartoum, Faculty of Medicine)
- May 1981.*
- *L.R.C.P. (London) - October 1988.*
- *M.R.C.S. (England) - November 1988.*
- *M.R.C.Path. (England) - February 1991.*
- *F.R.C.Path. (England)-January 2002*

Internship:

(01.09.1981 - 31.08.1982)

*Khartoum Teaching Hospital (Medicine, Surgery, Obstetrics and Gynaecology,
Orthopaedics and Traumatology).*

Senior House/Medical Officer:

(01.09.1982 - 21.07.1983)

*Department of Orthopaedics and Traumatology, Khartoum
Teaching Hospital (University Department).*

Registrar in medicine:

(22.07.1983 - 30.07.1984)

*Honorary Registrar in Medicine, Soba University Hospital, Khartoum, Sudan.
Research Assistant - Michigan State University /NIH/Sudan Project, Khartoum - Sudan.*

Research & Teaching Posts:

Registrar in Pathology: *(Soba University Hospital, Khartoum, Sudan).*

(01.08.1984 - 21.09.1986)

Research & Teaching Assistant, and Registrar in Pathology, Department of Pathology & Soba University Hospital, Faculty of Medicine, University of Khartoum Sudan.

Registrar in Haematology: *(Leeds General Infirmary, Leeds, UK.)*

(01.10.1986 - 30.05.1988)

Registrar in haematology: rotational training for registrars/senior registrars in Leeds Health Authority, West Yorkshire, UK. Duties included looking after in-patients, out-patients in general haematology clinics and anti-coagulant clinics. Training in Laboratory haematology. The Department's areas of interest were: leukaemia, Myeloma and lymphomas. The Department actively Participated in clinical trials of the MRC, United Kingdom.

Registrar in Haematology: *(St James's University Hospital, Leeds, UK.)*

(01.06.1988 - 14.06.1989)

Registrar in haematology: haematology rotational training programme for registrars/senior registrars in Leeds Health Authority District. The training included looking after patients in the wards, looking after bone marrow transplant patients and haemophiliacs who come routinely or acutely to the Haemophilia Unit. Outpatient duties included general haematology and anti-coagulant clinics. On-call duties 1 in 2 rotas. Laboratory training covered all aspects of laboratory haematology. Both the haemophilia and bone marrow transplant units are the Yorkshire Regional Units. St. James's University Hospital is the largest Teaching Hospital in the U.K.

Senior Registrar in Haematology: *(Yorkshire Regional Blood Transfusion Centre, Leeds).*

(15.06.1989 - 31.01.1990)

Duties included donor sessions, donor queries service plus training in all aspects of blood transfusion medicine. This rotation was part of the senior registrars' rotation in haematology in Yorkshire Region.

Honorary Senior Registrar in Haematology: *(Leeds General Infirmary, Leeds, U.K.)*

(01.02.1990 - 31.03.1991)

This was part of the senior registrars' rotational training in Yorkshire Region.

PRESENT APPOINTMENTS: -

- *Director General, Central Laboratory, Ministry of Science & Technology, Republic of Sudan, Khartoum, Sudan. (31.3.2011- to date).*

The Central Laboratory is a centre of Excellence at the Ministry of Science & Technology with that endeavours to reduce disease burden through innovation in rapid diagnostic kits and vaccines for endemic Diseases in the Sudan.

- *Professor/Consultant haematologist in the Department of Clinical Pathology & Immunology, Institute of Endemic Diseases, University of Khartoum (8.1.2001-to date).*

The Clinical Pathology and Immunology Department is actively involved in research in different endemic diseases especially kala-azar, tuberculosis and malaria. The department is responsible for running the kala-azar ward at Omdurman Teaching Hospital; Omdurman, this is a twenty beds ward that manages patients with L.donovani infections. The Department runs a weekly general haematology Clinic, a coagulopathy clinic, lymphadenopathy and a haemoglobinopathy clinic.

PAST APPOINTMENTS:

- *Director, Institute of Endemic Diseases, University of Khartoum, February 2006 - Jan 2011.*
- *Professor/Consultant haematologist and Head of the Department of Clinical Pathology & Immunology, Institute of Endemic Diseases, University of Khartoum (8.1.2001-November 2009).*
- *Associate Professor/Consultant haematologist and Head of the Department of Clinical Pathology & Immunology, Institute of Endemic Diseases, University of Khartoum. (17.6.1996 – 7.1.2001).*
- *Consultant: Haematology Division, & Blood Bank, Pathology Dept., Central Police Hospital. Khartoum, Sudan. The Haematology division also runs a weekly lymphadenopathy clinic, with special emphasis on Fine Needle Aspiration Cytology as a diagnostic tool. (15.2.1995-2008).*
- *Director, Sudanese National Blood Transfusion Services and Co-ordinator of the EMRO/ WHO Project No. SUD/THC/030. July 1996 – February 1999. During this period a review of the existing service was conducted with production of a work plan to establish a modern and cost effective transfusion service.*
 - *Preparation of Sudanese National Blood Transfusion Policy.*
 - *Preparation of Guidelines for donor selection and welfare and guidelines*

for the appropriate use of blood.

- *Planning for and execution of twenty workshops and seminars for doctors and nurses on the rational and appropriate use of blood.*
- *Consultant Haematologist: (Locum)
Royal East Sussex Hospital, Hastings, East Sussex, U.K.
The Haematology Department at the Royal East Sussex Hospital is part of the Pathology Discipline, two consultant haematologists run the Department. Duties included in-patient care, out-patient clinics and anti-coagulant clinics and supervision of the general Haematology laboratory work. On-call duties were on one-in-two basis. (01.04.1991 - 05.01.1992).*
- *Consultant in Hematology, Assistant Professor, Department of Pathology, Faculty of Medicine, University of Khartoum & Soba University Hospital, Khartoum, Sudan. (15.2.1992-28.9.1995).*
- *Assistant Professor, Consultant in haematology in the Department of Clinical Pathology & Immunology, Institute of Endemic Diseases, University of Khartoum. (29.9.1995 – 16.6.1996).*
- *Consultant Pathologis/haematologist: Elhikma Poly Clinics, Khartoum, Sudan. (March 1992-January 2003).*
- *Consultant Pathologist/haematologist: Sudanese Red Crescent Poly Clinics, Jomhoria Avenue, Khartoum, Sudan. (July 1996-May2003).*

TEACHING EXPERIENCE:

Undergraduate:

- *Fourth and Fifth year medical students, Faculty of Medicine, University of Khartoum. (15.2.1992-28.9.1995).*
- *Third and fourth year students, College of Medical Laboratory Technology, University of Khartoum. 15.2.1992 to date.*
- *Fourth/Fifth year students, College of Laboratory Medicine, Faculty of Medicine, Elneilin University.*

Postgraduate:

- *M.D. students, Pathology Department, Faculty of Medicine, university of Khartoum. (15.2.1992-28.9.1995).*
- *Master qualifying students, Institute of Endemic Diseases, University of*

Khartoum. May 1998 to date.

- *Molecular Medicine Master, Institute of Endemic Diseases, University of Khartoum, Sudan to date.*

ADMINISTRATIVE EXPERIENCE:

- *Academic Secretary, Pathology Dept., Faculty of Medicine, U. of Khartoum. February 1991 - March 1992.*
- *Director General, Sudanese National Blood Transfusion Services, July 1996 to January 1999. Co-ordinator of the EMRO/ WHO project No. SUD/THC/030. July 1996 – February 1999.*
- *Acting Director, Institute of Endemic Diseases, University of Khartoum, Khartoum, Sudan, January 1998 – August 1999.*
- *Head Department, Clinical Pathology & Immunology, Institute of Endemic Diseases, University of Khartoum, Khartoum, Sudan, July 1996 – October 2010.*
- *Director, Institute of Endemic Diseases, University of Khartoum, February 2006- Jan 2011.*
- *Director, Central Laboratory, Ministry of Science & Technology, Republic of Sudan, Khartoum, Sudan 31.3.2011- to date.*

RESEARCH PROJECTS:

CONCLUDED & ONGOING:

- *Safety, Immunogenicity and efficacy of Autoclaved leishmania major vaccine (ALM) in an endemic area of L.donovani infection in eastern Sudan. TDR/WHO. [Concluded]*
- *Safety and immunogenicity of ALUM/ALM vaccine in Healthy Sudanese volunteers. TDR/WHO. [Concluded]*
- *Immunochemotherapy for patients with persistent post kala-azar dermal leishmaniasis (PKDL) using Alum-precipitated ALM+BCG vaccine and sodium stibogluconate: a hospital-based approach. TDR/WHO. [Concluded]*
- *Immune profile and clinical presentations of patients with tuberculous lymphadenitis in the Sudan. University of Khartoum/Sudan. [Concluded]*
- *Latent M.tuberculosis infection: prevalence & Risk Factors in Central & Eastern Sudan. University of Khartoum/Sudan. [On Going]*
- *Anaemia of chronic malaria: the role of depressed erythropoietin response. [Concluded]*

- *Congenital Malaria: a neonatal prospectus. University of Khartoum/Sudan. [Concluded]*
- *Sickle cell anaemia: a card/registry system for the control of HbS in nomadic tribes in western Sudan. University of Khartoum/Sudan. [Concluded]*
- *Sickle haemoglobin screening: Cellulose acetate versus ID technique. University of Khartoum/Sudan. [Concluded]*
- *AID to displaced people in Sudan: magnitude and efficiency. University of Khartoum/Sudan. [Concluded]*
- *Sickle Disease Prevention: A card-registry system for prevention of Sickle cell disease among the Meissairya Tribes of Western Sudan. [Awaiting funding]*
- *Safety & Efficacy of SSG/Paromomycin combination in the treatment of Primary Sudanese Visceral Leishmaniasis. (DNDi_Geneva/LEAP 0104 A; DNDi_Geneva /LEAP 0104 B). Leishmaniasis East Africa Platform. [Concluded]*
- *Safety and efficacy of Single Dose Ambisome for the treatment of Visceral Leishmaniasis in East Africa: a multicentre, randomized trial.. (DNDi_Geneva /LEAP 0106). [Concluded]*
- *LeishF2/SSG Immunochemotherapy for the treatment of patients with persistent PKDL. IDRI; Seattle, USA/Institute of Endemic Diseases, University of Khartoum, Sudan. (Concluded 2011).*
- *Safety & Efficacy of Miltefosine/Ambisome Combination for the treatment of visceral leishmaniasis in East Africa: a multicentre, randomized trial. (DNDi_Geneva /LEAP 0208). [On Going]*
- *In silico prediction of T-cells epitopes of L.donovani as candidate subunit vaccines for visceral leishmaniasis. (/Institute of Endemic Diseases, University of Khartoum, Sudan). [On Going]*
- *Immunochemotherapy for patients with persistent PKDL using Alum-precipitated ALM+BCG vaccine and sodium stibogluconate: a field approach. TDR/WHO/Institute of Endemic Diseases, University of Khartoum, Sudan. (Awaiting funding).*

Out-Patient Clinics:

- *Lymphadenopathy Clinic (Fine Needle Aspiration Cytology Clinic) – bi-Weekly.*
- *General haematology clinic- Weekly*
- *Haemoglobinopathy clinic- Weekly*
- *Coagulation clinic. Weekly*

Community Service & Establishment of Services

1. **Haematology Unit, Central Police Hospital, Khartoum:**
The Unit has a ten-bed ward, modern haematology laboratory, Blood Bank and an out-patient clinic.

2. **Haemophilia & Coagulation clinic:** This is a weekly clinic catering for patients with bleeding disorders. A haemophilia forum (Sudanese Haemophilia Forum) for the Sudan was established to recruit and organize the expertise of those working in the field for better patient care. Membership of the World Federation of Haemophilia is currently applied for.
3. **General haematology clinic/weekly:** This is a weekly out-patient clinic, providing general haematology service to patients in Greater Khartoum area.
4. **Haemoglobinopathy clinic/weekly:** This clinic provides specialized diagnostic service and counselling for patients with haemoglobinopathy.
5. **Kala-azar ward:** Soba University Hospital, Khartoum, & Tropical Diseases Hospital, Omdurman, Sudan.
6. **Institute of Endemic Diseases, U. of Khartoum:** This is a research and community service providing centre, dealing with endemic and Tropical Diseases. The Institute is a centre of Excellence in research and treatment of tropical diseases (TWAS).
7. **Bazoura Rural Hospital, Gedarif State, Sudan:** This rural hospital was established in the heart of Kala-azar endemic area to provide diagnostic and treatment services for tropical diseases especially Kala-azar.
8. **Kala-azar treatment Centre, Kassab Rural Hospital, Gedarif State, Gedarif, Sudan.** This centre treats patients with tropical diseases with special visceral leishmaniasis and PKDL patients. The site is a research site for the Leishmaniasis Research Group of Sudan.
9. **Professor Elhassan Tropical Diseases Centre, Dooka, Gedarif, Sudan.** Elhassan's Centre treats patients with tropical diseases with special visceral leishmaniasis and PKDL patients. The site is a research site for the Leishmaniasis Research Group of Sudan.

MEMBERSHIPS OF ACADEMIC/SCIENTIFIC SOCIETIES:

- # Sudanese Society of Tropical Medicine & Hygiene.*
- # Sudanese Leishmaniasis Research Group [LRG/Sudan].*
- # Sudanese Red Crescent Research Experts Committee on Blood Transfusion.*
- # Tuberculosis Research Group (Institute of Endemic Diseases, U. of Khartoum).*
- # Sudanese Mycetoma Research Group.*
- # Sudanese National Blood Transfusion Committee.*
- # Leishmaniasis East Africa Platform (LEAP).*
- # Product Development Team, TDR/WHO, 24th March 1998- to 31st December 2000..*
- # The Higher Council of the Sudanese Medical Specialization Board (2006-date).*

The Scientific Advisory Committee of the Sudanese National Tb Control Programme.

Scientific Advisory Committee for the elimination of Leishmaniasis in the Indian subcontinent. TDR/WHO. (2008).

The Sudanese Society of Clinical Biology (President).

The Scientific Advisory Committee of the Arab Federation of Clinical Chemistry.

The Higher Consultative Committee, Health Insurance Corporation, Khartoum State.

PARTICIPATION IN INTERNATIONAL CONFERENCES, MEETINGS AND WORKSHOPS:

1. *Inter-country workshop on Transfusion Medicine: Appropriate use of blood, blood components and blood derivatives. Amman, Jordan. 12th –16th March 1995. (EMRO/WHO).*
2. *Regional workshop on Distance learning: Distance learning materials for safe blood and blood products. Amman, Jordan. 20th –24th March 1995. (EMRO/WHO).*
3. *Regional meeting of Directors of Blood Transfusion Services. (EMRO) Tunisia, Tunisia. 25th –29th September 1995. (EMRO/WHO).*
4. *1st European Conference on Tropical Medicine. Hamburg, Germany. 22nd –26th October 1995.*
5. *Regional meeting of Directors of Blood transfusion Services, EMRO/WHO. 5th –9th November 1997, Abu Dabi, United Arab Emirates.*
6. *3rd Residential Meeting of the Royal Society of Tropical Medicine & Hygiene, Cambridge, UK, 18th –20th September 1996.*
7. *Meeting of the Steering Committee on Vaccines for Leishmaniasis, TDR/WHO. Istanbul, Turkey, 1st –3rd May 1997.*
8. *First World Congress on Leishmaniasis, Istanbul, Turkey, 5th –9th May 1997.*
9. *1st Product Development Team Meeting, TDR/WHO, Quito, Ecuador, 24th –27th September 1998.*
10. *2nd Product Development Team Meeting, TDR/WHO, Bailadores, Venezuela, 14-16*

October 1999.

11. *Workshop on designing and developing clinical trials (for leishmaniasis vaccines development). TDR/WHO. Ouro Preto, Brazil, 17-20 April 2000.*
12. *The 3rd Leishmaniasis Vaccine Product Development Team (PDT) Meeting. TDR/WHO. Isfahan, Iran, 2-5 July 2000.*
13. *Oxford2000 "New Challenges in Tropical Medicine & Parasitology." Oxford, UK- 18-22 September 2000.*
14. *The Fifth Conference of the Syrian Clinical Laboratory Association. Damascus, Syrian Arab republic. 15th-17th September 2001.*
15. *Product Development Team, Vaccines for Leishmaniasis: Geneva, Switzerland, 5th December 2001. (Invited speaker).*
16. *Joint TDR/IDRI Leishmania Vaccine Clinical Trial Meeting: Geneva, Switzerland, 6th-7th December 2001.*
17. *Leishmaniasis Vaccine Product Development Team Meeting, Geneva, Switzerland, 24th – 25th October 2002.*
18. *Leishmaniasis Vaccine Product Development Team Meeting: Future Plans For Vaccine Development in Sudan. Khartoum, Sudan, 21st – 22nd February 2003.*
19. *Workshop on Developing a National Policy on Leishmaniasis Control in the Sudan. (Federal Ministry of Health, Sudan; WHO; MSF-Holland) Khartoum, Sudan, 23rd – 24th February 2003.*
20. *Conference on Endemic & Infectious Diseases in the Sudan: Ministry of Science and Technology, National Centre for Research; Tropical Medicine Research Institute; Institute of Endemic Diseases, U. of Khartoum & TDR/WHO. Khartoum, Sudan, 5-8 May 2003.*
21. *The 2nd LEAP (Leishmaniasis East Africa Platform)/DNDi Geneva meeting "Finding a new drug or combination of drugs for treatment of visceral leishmaniasis." Khartoum, Sudan 25-26.08.2003. (Consultant).*
22. *The 3rd LEAP (Leishmaniasis East Africa Platform)/DNDi Geneva meeting "Multicentre, randomized clinical trial on the efficacy of Paromomycin versus SSG versus SSG/Paromomycin combination for the treatment of visceral leishmaniasis." Addis Ababa, Ethiopia 12-13.05.2004. (Consultant)*
23. *GCP training course for the investigators of DNDi Geneva in preparation for "Multicentre, randomized clinical trial on the efficacy of Paromomycin versus SSG versus SSG/Paromomycin combination for the treatment of visceral leishmaniasis." Khartoum, Sudan 26-27.09.2004.*

24. *The 4th LEAP (Leishmaniasis East Africa Platform)/DNDi Geneva meeting “Multicentre, randomized clinical trial on the efficacy of Paromomycin versus SSG versus SSG/Paromomycin combination for the treatment of visceral leishmaniasis.” KEMRI, Kenya, 8-9.10.2004. (Consultant).*
25. *Audiometry training course for the investigators of DNDi/Geneva in preparation for “Multicentre, randomized clinical trial on the efficacy of Paromomycin versus SSG versus SSG/Paromomycin combination for the treatment of visceral leishmaniasis.” Khartoum, Sudan, November 2004.*
26. *The 2nd Lenasese Congress of Clinical Biology. 30th September 2nd October 2004. Beyriuth, Lebanon.*
27. *XXVIth Interantional Congress of the World Federation of Haemophilia. Bankok, Thailand, 17th 21st October 2004.*
28. *The 5th LEAP (Leishmaniasis East Africa Platform)/DNDi Geneva meeting “Multicentre, randomized clinical trial on the efficacy of Paromomycin versus SSG versus SSG/Paromomycin combination for the treatment of visceral leishmaniasis.” Khartoum, Sudan 11-12.03.2005. (Consultant).*
29. *The 6th LEAP (Leishmaniasis East Africa Platform)/DNDi Geneva meeting “Multicentre, randomized clinical trial on the efficacy of Paromomycin versus SSG versus SSG/Paromomycin combination for the treatment of visceral leishmaniasis.” Addis Ababa, Ethiopia 11-12.02.2006. (Consultant).*
30. *The 2nd DNDi consultative meeting on the pharmacokinetics of paromycin, paromycin/SSG combination in Sudanese patients with visceral leishmaniasis analysis as part of the multicenter randomised clinical trial to test Paromomycin versus SSG versus a combination of SSG and Paromomycin for treatment of visceral leishmaniasis, 8-9.06.2006, KEMRI, Nairobi, Kenya. (Consultant).*
31. *The 11th Conference of Pan Arab Association of Clinical Biology, Damascus, April/May; Syria 2006. XXVIIth Interantional Congress of the World Federation of Haemophilia. Vancouver, Canada .May 2006.*
32. *The 7th LEAP (Leishmaniasis East Africa Platform)/DNDi Geneva meeting “Multicentre, randomized clinical trial on the efficacy of Paromomycin versus SSG versus SSG/Paromomycin combination for the treatment of visceral leishmaniasis.” Kampala, Uganda 15-16.03.2007. (Consultant).*
33. *The Annual Meeting of the Tunisian Association of Clinical Biology, Tunisia, Tunisia May 2007.*
34. *Leishmaniasis East Africa Platform/DNDi (LEAP/DNDi) principal investigators’ meeting, Nairobi, Kenya 8th to 9th May 2008.*

35. *Leishmaniasis East Africa Platform/DNDi (LEAP/DNDi) bi-annual meeting, Addis Ababa, Ethiopia August 2008.*
36. *The 8th Conference of Syrian Clinical Laboratory Association. Damascus, Syria 3rd 5th October 2008.*
37. *Leishmaniasis East Africa Platform/DNDi (LEAP/DNDi) Principal investigators' meeting, Lucknow, India 4th February 2008.*
38. *Annual meeting of the Scientific Advisory Committee for the elimination of Leishmaniasis in the Indian subcontinent. TDR/WHO. July 2009.*
39. *Leishmaniasis East Africa Platform/DNDi (LEAP/DNDi) Principal investigators' meeting, Nairobi, Kenya 9th to 11th November 2009.*
40. *The 12th Scientific Conference of the Arab Federation of Clinical Chemistry, Beirut, Lebanon December 2009.*
41. *Leishmaniasis East Africa Platform/DNDi (LEAP/DNDi) consultative meeting, Kampala, Uganda 17-20 March 2010.*
42. *The Jordanian Conference of Biological and Medical Laboratory Sciences, Jordan Amman, June 2010.*
43. *Africa City of Technology Summer Schools. Khartoum, Sudan 13-17 June 2010 "A week on Recent Trends on Nanobiotechnology "Nanobiotechnology: SMALL Science, BIG Consequences" Guest speaker.*
44. *14th Leishmaniasis East Africa Platform consultative meeting, Khartoum, Sudan 2nd October – 4th October 2010.*
45. *9th Scientific conference of the Syrian Association of Clinical Laboratory Medicine, 23rd 26th October 2010. Session Chairperson & oral presentation.*
46. *DNDi/Geneva Partners' meeting, Delhi, India, December 2010.*
47. *The 21st International Congress of Clinical Chemistry & Laboratory Medicine and the 19th IFCC-ECC European Congress of Clinical chemistry & Laboratory Medicine. Berlin, Germany: May 2011. Guest speaker.*
48. *DNDi Stakeholders & 16th LEAP meetings, Nairobi, Kenya 20-24 September 2011.*
49. *17th Leishmaniasis East Africa Platform (LEAP) Meeting, Kampala, Uganda, February 28-29, 2012.*

50. 18th Leishmaniasis East Africa Platform_DNDi/10th Principal Investigators Meeting, Khartoum-Sudan 2nd – 3rd September 2012.

PUBLICATIONS:

1. Khalil EAG; Homeida MMA; ALI HM; Suleiman S. Efficacy and tolerance of two brands of Praziquantel: Biltricide and Distocide. Sudan Med. J. 1986;vol. 23: (3-12)
2. Omer M; Gasim TA; Homeida MMA; Ali HM; Elwakil ES; GearyTG; Westerman RL; Jensen JB. A comparison of chloroquine and Clindamycin for the treatment of uncomplicated plasmodium falciparum malaria in the Sudan. Sudan Med. J. 1989;vol. 27:(1-4)
3. El Hassan AM, Fahal AH, El Hag IA, Khalil EAG. The Pathology of Mycetoma. Sudan Med. J. 1994;vol 32 (suppl): (23-45).
4. El Hassan AM, Zijlstra EE, Khalil EAG, Ghalib HW, Ismail. A. The spectrum of leishmania donovani infection in Salala village, Gedarif state: a longitudinal study. Sudan Med. J. 1995;vol 33 (1): 63-66.
5. Hashim FA, Khalil EAG, Ismail A, El Hassan AM. Apparently successful treatment of two cases of post kala-azar dermal leishmaniasis with liposomal Amphotericin B. Trans Roy Soc Trop Med Hyg (1995) 89,44.

6. Gaafar A, Ismail A, Kadaru AY, Hashim E, Khalil EAG, EL Hassan AM. Necrotizing and suppurative lymphadenitis in leishmania major infections. *Tropical Medicine & International Health* (1996), vol. 1(2): 243-250.

7. El Hassan AM, Meridith SEO, Yagi HI, Khalil EAG, Ghalib HW, Abbas K, Zijlstra EE, Kroon CCM, Ismail A. Sudan mucosal leishmaniasis: epidemiology, clinical features, diagnosis, immune responses and treatment. *Trans Roy Soc Trop Med Hyg* (1995) 89,647 652.

8. El Hag IA, Fahal AH, Khalil EAG. (1996). Fine Needle Aspiration cytology of Mycetoma, *Acta Cytologica*; 40(3): 461-464.

9. Khalil EAG, Davidson RN, Nur NM, Zijlstra EE, El Hassan AM. Failure of a combination of Terbinafine and Itraconazole in the treatment of Post kala-azar dermal leishmaniasis in the Sudan. *Transaction of the Royal Society of Tropical Medicine & Hygiene*, (1996), 90: 187-188.

10. El Hassan AM, Kadaru AMY, Khalil EAG, Fadl A, El Hassan M. The Pathology of cutaneous leishmaniasis in the Sudan: a comparison with other geographical areas. *Ann. Trop. Med. Parasitol.* 1996; 90 (5): 485.

11. El Hassan AM, Hashim FA, Khalil EAG, Kadaru AMY, Ahmed AE, Elturabi H. Neurologic manifestation of visceral leishmaniasis. (1996). *LabMedica International.* 13:7-11.

12. Andersen K, Gasim S, Elhassan AM, Khalil EAG, Barker DC, Theander TG & Kharazmi A. (1997). Diagnosis of visceral leishmaniasis by the polymerase chain reaction using blood, bone marrow and lymph node samples from Sudan. *Tropical Medicine & International Health*, 2:440-445.

13. Ibrahim ME, Suleiman AM, Hashim FA, Khalil EAG, Evans D, Kharazmi A & Elhassan AM. (1997). Oronasal leishmaniasis caused by a parasite with an unusual isoenzyme profile. *American Journal of Tropical Medicine & Hygiene*, 56(1):96-98.

14. Osman OF, Oskam L, Zijlstra EE, Kroon NCM, Schoone GJ, Khalil E.A.G. & Elhassan AM. (1997). Evaluation of the Polymerase Chain Reaction for the diagnosis of visceral leishmaniasis. *Journal of Clinical Microbiology*, 35:2454-2457.

15. Khalil E.A.G., Elhassan AM, Zijlstra EE, Hashim FA, Ibrahim ME, Ghalib HW & Ali MS. (1998). Treatment of visceral leishmaniasis with sodium stibogluconate in Sudan: management of those who do not respond. *Annals of Tropical Medicine & Parasitology*. 92(2): 151-158.

16. Khalil EAG, Hashim FA, Mustafa MD, Kordofani A, Satti M, El Hag IA, Elsafi S, Hag Ali M, Zijlstra EE, El Hassan AM, Ghalib HW, Ali MS. A comparative study comparing liposomal amphotericin B (AmBisome) and sodium stibogluconate in the treatment of kala-azar in the Sudan. *East African Med. J.*; 1998, 75(8):37-45.

17. Elhassan AM, Khalil E.A.G., Elsheikh EA, Zijlstra EE, Osman A. & Ibrahim ME. (1998). Post Kala-azar ocular leishmaniasis. *Transaction of the Royal Society of Tropical Medicine & Hygiene*, 92:177-179.

18. Osman OF, Oskam L, Kroon NC, Schoone Gj, Khalil EAG, Elhassan AM & Zijlstra EE. (1998). Use of PCR for diagnosis of post kala-azar dermal leishmaniasis. *J Clin Microbiol*, 36(6):1621-4.

19. Gasim S, Elhassan AM, Khalil EA, Ismail A, Kadaru AM, Kharazmi A, Theander TG. (1998). High levels of plasma IL-10 and expression of IL-10 by keratinocytes during visceral leishmaniasis predict subsequent development of post-kala-azar dermal leishmaniasis. *Clin Exp Immunol*; 111(1):64-9. Erratum in: *Clin Exp Immunol*; 112(3):547.

20. Saeed AM, Khalil EAG, Elhassan AM, Hashim FM, Elhassan AM, Fandrey J & Jelkman W. (1998). Serum erythropoietin concentration in anaemia of visceral leishmaniasis (kala-azar) before and during antimonial therapy. *British Journal of Haematology*, 100(4): 720-724.

21. Staalo, T., Khalil E.A.G., Elhassan I.M., Zijlstra E.E., Elhassan A.M., Giha H, Theander T. & Jacobsen P.H. (1998). Antibody reactivity to conserved linear epitopes

- of Plasmodium falciparum erythrocyte membrane protein 1 (PfEMP1). *Immunology Letters*, 60:121-126.
22. Zijlstra EE, Daifalla NS, Kager PA, Khalil, EAG, Reed SG & Ghalib HW. (1998). rK39 enzyme-linked immunosorbent assay for diagnosis of leishmania donovani infection. *Clinical & Diagnostic Laboratory Immunology*; 5(5): 717-720.
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24. Khalil EAG, Elsiddig, KE, Elsafi MEMO, El-Hag, Elkhidir IM, Suleiman G, Hussein AM, Ibrahim ME. & Elhassan A.M (2000). Supra-sternal tuberculous abscess: a report of three cases; *Trans Roy Soc Trop Med Hyg*; 94:1-3.
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Supervision of M.Sc., MD & PhD theses, University of Khartoum:

1) Interaction between Sick cell haemoglobin, G-6-P-D deficiency, Haemoglobin F level and Malaria.

Student: - Dr. Enaam Mahgoub Elbadawi. (MD in Pathology)

2) Foetomaternal haemorrhage: Incidence, volume and its relation to the mode of delivery in Khartoum State.

Student: - Dr. Samia Mohamed Moawad. (MD in Pathology)

3) Safety and Immune modulatory effects of escalating doses of Alum-precipitated autoclaved *Leishmania major* (ALM) vaccine plus BCG in healthy Sudanese volunteers.

Student: Areeg A/Aziz Kamil (MSc in Immunology).

4) Sick cell Anaemia in an immigrant tribe from eastern Sudan: comparison between the ID particle gel Diffusion and membrane electrophoresis.

Student: Ahmed A/Hafeez Nimir (MSc in Haematology).

5) Rapid epidemiological assessment of *L.donovani* infection in eastern Sudan: immuno-epidemiological and drug-sensitivity surveys.

Student: Abdalla Hassan Sherief (Ph.D. Immunology).

6) Molecular Characterization of the causative organism of tuberculous lymphadenitis in the the Sudan.

Student:Elfatih Saif Eldin A/Rahman Eljafari (M.Sc. in Molecular Biology).

7) Surrogate markers of immunity to human visceral leishmaniasis.

Student:Nahla Babikir Ayed (MSc in Immunology)

8) Future effects of imported ^s haplotypes on the epidemiology of Plasmodium falciparum infection in eastern Sudan: a possible scenario.

Student: Fatima Eltigani Ahmed (M.Sc. Molecular Biolog).

9) Immunoglobulin genes re-arrangement in Sudanese patients with leukaemias: a lineage marker.

Student: Manal Satti (M.Sc. Molecular Biology).

10) Tuberculous lymphadenitis: surrogate markers of disease & healing.

Student:Awatif Ahmed Elnour (MSc in Immunology).

11) Haemovigilance: post-transfusion malaria as an example.

Student:Ibrahim Ahmed Ali (MSc in Immunology).

12) Possible predisposing factors for the development of thrombotic cerebrovascular accidents (CVAs) in Sudanese patients<50 years.

Student:Abd Elgadir Haj Elagib (MSc in Immunology).

13) Height, body weight and susceptibility to tropical disease: visceral leishmaniasis as

an example. 2001.

Student: Nagah Abd Elwahab Ahmed (MSc in Immunology).

14) Hepatotoxicity of Visceral Leishmaniasis: Serum Cytochrome c a Surrogate Marker of Apoptosis.

Student: Wiesal Eltayeb Mohammed Elkheir Eltayeb. (MSc in Immunology).

15) Anti-plasmodial Effects of *Azadirachta indica* (Neem) in Experimental Cerebral Malaria: Apoptosis of Cerebellar Purkinje Cells of Mice as a Marker.

Student: Selma Mahmoud Bedri (MSc in Immunology).

16) Microalbuminuria and urinary Retinol Binding Protein (*urRBP*): markers of subtle renal injury in patients with visceral leishmaniasis.

Student: Nuha AA Elnijoomi (MSc in Immunology).

17) Multi-drug resistant *Mycobacterium tuberculosis* complex among patients with tuberculous lymphadenitis.

Student: Nagat Ibrahim Elhag (MSc in Immunology).

18) Probable pre-leukaemic cytogenetic and molecular aberrations in cohort of Sudanese neonates: MLL gene paradigm.”

Student: Mohamed Salih Elnour Mohamed (MSc in Molecular Biology).

19) *Leishmania donovani* infectivity in a monocytes and monocyte-derived

macrophages: the role of humoral immunity in visceral leishmaniasis.

Student: Sara Noureldyme Mohammed (MSc in Immunology).

20) Pregnancy-associated malaria in Sudan: prevalence and possible risk factors.

Student: Samia Ali Omer (PhD immunology).

21) Pregnancy-associated thyroiditis: an autoimmune disorder in Sudanese women.

Student: Adel Nasr Morsi (MSc Immunology).

22) The patterns of Haptoglobin phenotypes in Sudanese patients with pulmonary Tuberculosis.

Student: Dr. Adil Abd Elrahman Elagib. (MD SMSB) .

23) Human Conception Disorders: an immunological perspective.

Student: Habab Musa Abdalla Saad (MSc Immunology).

24) Neonatal malaria: Probable immune system modulation by *Plasmodium falciparum* infection.

Student: Kawthar Abd Algaleil Mohammed Salih (MSc. Immunology).

25) Rh blood group system alleles, haplotypes and genotypes in major Sudanese Populations: an immunological study of ethnology.

Student: Malik Hassan Ibrahim Mustafa (PhD Immunology).

26) *Prevalence of anti-P. falciparum Merozoite Surface Protein-1₁₉ (PfMSP1-19) antibodies among pregnant Sudanese women at a central referral maternity hospital.*

Student: Manal Ibrahim Hussein Adam. (M.Sc Immunology).

27) Cellular and Humoral Immune Responses Profiles in Sudanese Patients with Type II Diabetes Mellitus: Response to Purified ProteinDerivative and MSP-1₁₉ antigens.

Student: Mariam Khalid Hassan HUSSEIN (PhD Immunology).

28) Trachoma in a cluster of villages of internally displaced population (IDP) in eastern of Sudan: comparison between clinical & serological diagnoses.

Students: Mohammed Osman Elhassan (MSc Immunology).

29) Sero-prevalence of anti-merozoite surface protein-1 (19) (MSP1₁₉) antibodies in an area of unstable malaria transmission: examining a candidate vaccines for malaria.

Students: Mohanned Othman A/Allah (MSc Immunology).

30) Prevalence of Specific Mutant Genes (D76N, C18R & R197H) In Sudanese Patients with Type II Diabetes mellitus.

Student: Nahla Ahmed A.Rahman El.Sheikh (MSc Immunology).

31) Th1/Th2 →Th1 immune response switch: the case of post kala-azar dermal leishmaniasis.

Student: Salma Abd Elmonim Khidir (MSc. Immunology).

32) In vitro induction/augmentation of unresponsiveness to sodium stibogluconate in Leishmania donovani isolates.

Student: Sara Hamad Hassab Elgawi (MSc Molecular Biology).

33) Deficiency of natural anticoagulants as predictors of thrombotic episodes in pregnant Sudanese women in Saudi Arabia

Student: Siddig Safiddin Mohammed (MSc in Immunology).

34) Humanitarian Aid for the Internally Displaced People in Sudan: adequacy and efficiency.

Student: Wigdan Mohamed Ahmed Ismaiel. (PhD International Health/Copenhagen University, Denmark).

35) Carrier detection and Inhibitor prevalence in Sudanese Patients with haemophilia.

Student: Fathia Adam Mohamed Salih. (PhD Immunology).

36) Latent Mycobacterial infections Among Healthcare Workers in Greater Medani, Gaziera State, Central Sudan: Tuberculin Skin Test and IFN- γ as Infection Markers.

Student: Abeer Idris Mohamed Taha (M.Sc Immunology)

37) Flowcytometric Immuno-phenotyping of Cord Blood Mononuclear Cells in Sudanese newborns: Patterns of Health and Disease.

Student: Mugtaba Elsamman Ahmed (M.Sc. in Immunology).

38) *P.falciparum* Immune evasion mechanisms: Possible Roles for allelic polymorphism and antigenic variations in Sudanese isolates.

Student: Habab Mirgani Yassin (PhD in Immunology)

39) Frequency of *BCR-ABL* transcripts among Sudanese patients with persistent myeloid leukocytosis: a possible aide in the diagnosis of chronic myeloid leukaemia.

Student: Mahadi Hussein Abd Elrazig Abdalla (PhD in Molecular Biology)

40) *In silico* prediction of immune dominant T-cells epitopes of *Leishmania donovani*

GP63 protein: a novel approach for vaccine development.

Student: Dr Mona Elfaki Eltahir Elfaki (PhD Molecular Biology)

41) Latent Tuberculosis Infection: Prevalence and Immune surrogate markers of

progression to overt disease.

Student: Amani Osman Shakak (PhD of Immunology).

42) Anti-Leishmania donovani antibodies enhance promastigotes internalization into host macrophage.

Student: Sara Noureldyme Mohamed. (M.Sc. In Immunology).

43) Toll-Like Receptor-2 gene (TLR2) Polymorphism and Susceptibility to Mycobacteria tuberculosis Infections in Sudanese patients.

Student: Samah MohiEldin HabibAlla Mohammed (M.Sc. In Molecular Biology).

44). Mannose-Binding Lectin-2 gene Mutation, Mannose-Binding Lectin Serum Level and Susceptibility to Leishmania donovani Infections.

Student: Tayseir Mahi Eldin Abd Alla Elawad (M.Sc. In Molecular Biology).

45) Drug Resistance and Multi-drug-resistant *Mycobacterium tuberculosis* Strains among Patients with Pulmonary Tuberculosis in Khartoum State – Sudan.

Student: Asrar Mohammed A/Salam Elegail (PhD in Molecular Biology).

Reviewer for Scientific Journals:

- 1. University of Khartoum Medical Journal.**
- 2. Saudi Medical Journal.**
- 3. Expert Reviews.**
- 4. Vaccine.**
- 5. Transactions of the Royal Society of Tropical Medicine & Hygiene.**
- 6. WHO Bulletin.**
- 7. BMC_Nephrology.**
- 8. Transactions of the Royal Society of Tropical Medicine and Hygiene.**