



FACULTY FULL NAME:

Dr. Elfadil Mustafa Abass

POSITION:

Associate Professor

Personal Data

Nationality | Sudan

Date of Birth |

Department | Clinical Laboratory Science

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Language Proficiency

Language	Read	Write	Speak
Arabic	Native	Native	Native
English	Fluent	Fluent	Fluent
German	Intermediate	Intermediate	Intermediate

Academic Qualifications (Beginning with the most recent)

Date	Academic Degree	Place of Issue	Address
2013	PhD	Germany	Institute for Medical Microbiology and Hospital Hygiene, Philipps University, Marburg, Germany
2003	MSc	Sudan	Faculty of Medicine, Juba University, Khartoum, Sudan
1996	BSc	Sudan	Faculty of Medical Laboratory Sciences, University of Khartoum, Khartoum, Sudan

PhD, Master or Fellowship Research Title: (Academic Honors or Distinctions)

PhD	Identification of a Novel Recombinant Protein for Improved Diagnosis of Visceral Leishmaniasis in Sudan
Master	Evaluation of an Analogous Direct Agglutination Test in an ELISA technique for Diagnosis of Visceral Leishmaniasis in Sudan
Fellowship	---



Professional Record: (Beginning with the most recent)

Job Rank	Place and Address of Work			Date
Associate Professor	Department of Clinical Laboratory Science	College of Applied Medical Sciences, Imam Abdulrahman Bin Faisal University (IAU), Dammam, Saudi Arabia	Apr. 6, 2021	Present
Assistant Professor	Department of Clinical Laboratory Science	Research and Grant Unit, Ahfad University for Women, Omdurman, Sudan	Feb. 20, 2017	Apr. 5, 2021
Assistant Professor	Laboratory for Biomedical Research	Institute for Medical Microbiology and Hospital Hygiene, Philipps University, Marburg, Germany	Jan. 1, 2014	Jan. 12, 2017
Post-doc	Microbiology	Institute for Medical Microbiology and Hospital Hygiene, Faculty of Medicine, Philipps University, Marburg, Germany	Sep. 25, 2013	Aus. 31, 2014
PhD candidate	Microbiology	Ahfad University for Women, Omdurman, Sudan	Oct. 1, 2009	Sep., 23, 2013
Lecturer	Microbiology	Ahfad University for Women, Omdurman, Sudan	Sep. 13, 2003	June, 1, 2009
Teaching Assistant	Microbiology	Ahfad University for Women, Omdurman, Sudan	Jul. 1, 1997	Dec. 1, 2000

Administrative Positions Held: (Beginning with the most recent)

Administrative Position	Office	Date
Program Coordinator	Clinical Laboratory Science, College of Applied Medical Sciences, Imam Abdulrahman Bin Faisal, Dammam, Saudi Arabia.	Apr. 2018-17/1/2022
Program Coordinator	MSc Microbiology track, Faculty of Medical Laboratory Sciences, Sudan International University	2014-2017
Chairperson	Department of Microbiology, Faculty of Medical Laboratory Sciences, Sudan International University	2014-2017



Scientific Achievements

Published Refereed Scientific Researches

(In Chronological Order Beginning with the Most Recent)

#	Name of Investigator(s)	Research Title	Publisher and Date of Publication
1	Rouzbeh Mahdavi, Franjo Martinkovic, Hosam Shams-Eldin, Ingrid E Pereira, Alexandre B Reis, Andreas Latz, Daniela Heinz, Cristina Aira, Alba Fresco-Taboada, Elfadil Abass, Jelena Romero-Olmedo, Henrique C Teixeira, Ulrich Steinhoff	Comparative Study of a Novel Lateral Flow Rapid Test with Conventional Serological Test Systems for the Diagnosis of Canine Leishmaniosis in Croatia and Brazil	Pathogens 13 (2), 109. 2024
2	Rouzbeh Mahdavi, Hosam Shams-Eldin, Sandra Witt, Andreas Latz, Daniela Heinz, Alba Fresco-Taboada, Cristina Aira, Marc P Hübner, Dalia Sukyte, Alexander Visekruna, Henrique C Teixeira, Elfadil Abass, Ulrich Steinhoff	Development of a novel enzyme-linked immunosorbent assay and lateral flow test system for improved serodiagnosis of visceral leishmaniasis in different areas of endemicity	Microbiology Spectrum 11 (3), e04338-22. 2023
3	Hassan FM, Alsultan AA, Alzahrani F, Albuali WH, Bubshait DK, Abass EM, Elbasheer MA, Alkhanbashi AA.	Identification of RPL5 gene variants and the risk of hepatic vein thrombosis in Saudi patients.	Saudi Med J. 42(9):969-974. doi: 10.15537/smj.2021.42.9.20210240. PMID: 34470834. 2021.
4	Hassan, F. M., Alsultan, A., Alzehrani, F., Albuali, W., Bubshait, D., Abass, E., Elbasheer, M., & Alkhanbashi, A..	Genetic Variants of RPL5 and RPL9 Genes among Saudi Patients Diagnosed with Thrombosis.	Medical archives (Sarajevo, Bosnia and Herzegovina), 75(3), 188–193. https://doi.org/10.5455/medarh.75.188-193 . 2021.
5	Abass E	Low serum zinc concentrations in Sudanese patients with visceral leishmaniosis does not impair the anti-Leishmania antibody response.	Ann Parasitol. 2020;66(4):481-488. doi: 10.17420/ap6604.288. PMID: 33646737. 2020.
6	Pereira IE, Silva KP, Menegati LM, Pinheiro AC, Assunção EAO, Araújo MLP, Abass E, Duthie MS, Steinhoff U, Teixeira HC.	Performance of recombinant proteins in diagnosis and differentiation of canine visceral leishmaniasis infected and vaccinated dogs.	Eur J Microbiol Immunol (Bp). 27;10(3):165-171. doi: 10.1556/1886.2020.00018. PMID: 32857712; PMCID: PMC7592511. 2020.
7	Abass E.	Leishmania donovani infection in Eastern Sudan: Comparing	Asian Pac J Trop Med. 13(7): 322-327. Doi: 10.4103/1995-7645.28583. 2020.



		direct agglutination and rK39 rapid test for diagnosis-a retrospective study.	
8	Abass E, Haroun A and Jomaa M .	Serological screening of HIV and viral hepatitis revealed low prevalence among visceral leishmaniasis in Sudan.	Ann Parasitol. 66(2): 135-141. Doi: 10.17420/ap6602.248. 2020.
9	Abass E, Al-Hashem Z, Yamani LZ.	Leishmaniasis in Saudi Arabia: Current situation and future perspectives.	Pak J Med Sci. 36(4): 836-842. Doi: 0.12669/pjms.36.4.2121 . 2020.
10	Harith AE, Mahamoud A, Abass E, Mansour D, Moura de Melo C, Madi RR, Seniao-Santos SJ, Osman HA.	Modifications in a Reference Freeze-Dried Direct Agglutination Test to Improve Visceral Leishmaniasis Detection.	Am J Trop Med Hyg. 102(4):782-787. Doi:10.4269/ajtmh.19-0745. 2020.
11	Luu M, Romero R, Razant J, Abass E, Hartmann S, Leister H, Fisher F, Mahdavi R, Plaza-Sirvent C, Schmitz I, Steinhoff U (2020).	The NF-κB transcription factor c-Rel controls host defense against Citrobacter rodentium.	Eur J Immunol 50 (2): 292-294. Doi.org/10.1002/eji.201948314. 2020
12	Harith AE, Mahamoud A, Awad Y, Mansour D, Abass EM, Agib AE, Madi RR, Seniao-Santos SJ, Osman HA.	Are We Now Well Prepared for Another Major Visceral Leishmaniasis Epidemic in Sudan?	Open Forum Infect Dis. 6 (10): ofz226. Doi:10.1093/ofid/ofz226. 2019.
13	Mohammed I, Abass E.	Phenotypic detection of Extended Spectrum β-Lactamases (ESBL) among gram negative uropathogens reveals highly susceptibility to imipenem.	Pak J Med Sci. 35 (4): 1104-1109. Doi: 10.12669/pjms.35.4.207. 2019.
14	Mahamoud A, Osman HA, Abass EM, Agib AE, Madi RR, Semiao-Santos SJ, Harith AE.	Identification of an area predominantly endemic for childhood and adolescent visceral leishmaniasis in central Sudan.	Acta Tropica 178(2018): 142-147. Doi.org/10.1016/j.actatropica.2017.11.010. 2018.
15	Abass E, Abduljalil W, Alnour S, Mohammed T, Hamid S, Mostafa S, Basheer M	Seroprevalence of Rubella Antibodies in Infertile and Pregnant Sudanese Women.	J Cli Dia Res, 12 (12): DC17-DC20. Doi: 10.7860/JCDR/2018/37771.12404 . 2018.
16	Martínez Abad LP; Almeida CS; Mattos AMM; Mendonça ACP; Alves MJM; Pinheiro AC; Porrozzi; Abass E; Steinhoff U; Teixeira HC.	Diagnostic Accuracy of rKLO8 Versus rK26 ELISAs for Screening of Canine Visceral Leishmaniasis Compared to the Methods Officially Adopted in Brazil.	Acta Tropica 166(2017): 133–138. Doi: 10.1016/j.actatropica.2016.11.021. 2017.



17	Osman HA, Mahamoud A, Abass EM, Madi RR, Santos SJS, Harith AE	Local production of a liquid version of direct agglutination test as sustainable measure for visceral leishmaniasis control in Sudan.	Am J Trop Med Hyg. 94(5): 982-986 Doi: 10.4269/ajtmh.15-0574. 2016.
18	Abass E, Steinhoff U, Harith AE.	Challenges in the Diagnostic of Visceral Leishmaniasis in Sudan.	Inter. J. Coll. Res. Intern. Med. Pub. Health. 8(8): 470-471. 2016.
19	Abass E, Cholho Kang, Franjo Martinkovic, Saul J. Semião-Santos, Peter Walden, Renaud Piarroux, Abdallah el Harith, Michael Lohoff, Ulrich Steinhoff.	Heterogeneity of Leishmania Donovanii Parasites Complicates Diagnosis of Visceral Leishmaniasis: Comparison of Different Serological Tests in Three Endemic Regions.	PLoS ONE 10(3): e0116408. Doi: 10.1371/journal.pone.0116408. 2015.
20	Abass E, Bollig N, Reinhard K, Camara B, Mansour D, Visekruna A, Lohoff M, Steinhoff U.	rKLO8, a Novel Leishmania donovani-Derived Recombinant Immunodominant Protein for Sensitive Detection of Visceral Leishmaniasis in Sudan.	PLoS Neg Trop Dis. 7(7): e2322. Doi: 10.1371/journal.pntd.0002322. 2013.
21	Bollig N, Brüstle A, Kellner K, Ackermann W, Abass E, Raifer H, Camara B, Brendel C, Giel G, Bothur E, Huber M, Paul C, Elli A, Kroczek R, Nurieva R, Dong C, Jacob R, Mak T and Lohoff M.	Transcription factor IRF4 determines germinal center formation through follicular T-helper cell differentiation.	Proc Natl Acad Sci U S A. 109(22):8664-8669. Doi: 10.1073/pnas.1205834109. 2012.
22	Reinhard K, Huber M, Weber C, Hellhund A, Toboldt A, Abass E, Casper B, Herr C, Bals R, Steinhoff U, Lohoff M, Visekruna A.	c-Rel promotes type1 and type 17 immune responses during Leishmania major infection.	Eur J Immunol. 41(5):1388-1398. Doi: 10.1002/eji.201041056. 2011.
23	Abass E, Mahamoud A, Mansour D, Mohebbali M, Harith AE.	Validation of a β -ME ELISA for Detection of Anti Leishmania Donovanii Antibodies in Eastern Sudan.	Iran J Immunol. 8(3): 150-158. Doi: IJlv8i3A2. 2011.
24	Mansour D, Abass EM, Mahamoud A, el Harith A.	Qualitative and semi-quantitative comparison of an rK39 strip test and direct agglutination test for detection of anti-Leishmania donovani antibodies in the Sudan.	Iran J Immunol. 6(4): 208-215. Doi: IJlv6i4A6. 2009.
25	Mansour D, Abass EM, Mutasim M, Mahamoud AE, and Harith AE.	Use of a Newly Developed β -Mercaptoethanol Enzyme-Linked	Clin Vacc Immunol 14(12): 1592-1595. Doi: 10.1128/CVI.00313-07. 2007.



		Immunosorbent Assay to Diagnose Visceral Leishmaniasis in Patients in Eastern Sudan.	
26	Abass EM, Mansour D, Harith AE.	Demonstration of agglutinating anti-Leishmania donovani antibodies in lymph node aspirate for confirmation of kala-azar serodiagnosis.	J Med Microbiol 56(Pt 9): 1256-1258. Doi: 10.1099/jmm.0.47267-0. 2007.
27	Mutasim ME, Mansour D, Abass EM, Hassan WM, Harith AE.	Evaluation of a glycerol-preserved antigen in the direct agglutination test for diagnosis of visceral leishmaniasis at rural level in eastern Sudan.	J Med Microbiol. 55(Pt 10). 1343-1347. Doi: 10.1099/jmm.0.46753-0. 2006.
28	Abass EM, Mansour D, Mutasim ME, Hussein M, Harith AE.	Beta mercaptoethanol modified ELISA for diagnosis of visceral leishmaniasis.	J Med Microbiol 55(Pt 9), 1193-1196. Doi: 10.1099/jmm.0.46643-0. 2006.
29	Harith AE, Mutasim ME, Mansour D, Mustafa EF, Harold Arvidson.	Use of glycerol as an alternative to freeze drying for long term preservation of antigen for direct agglutination.	Trop Med Intern Health 8(11): 1025 – 1029. Doi: 10.1046/j.1360-2276.2003.01129.x. 2003.

Refereed Scientific Research Papers Accepted for Publication

#	Name of Investigator(s)	Research Title	Journal	Acceptance Date

Scientific Research Papers Presented to Refereed Specialized Scientific Conferences

#	Name of Investigator(s)	Research Title	Conference and Publication Date
1	Abuelquasim. M. Hassan, Namarig .S. Mohammed, Samah F. Mohammed, Wafaa. A. Mohammed, Wafaa M. Edriss, Amel A. Ahmed, E. Abass.	Serological Screening of Cytomegalovirus Infection among Sudanese Patients with Leukemia, Breast and Prostate Cancers at Radiation-Isotope Center in Khartoum.	18th International Conference on Breast Cancer. Daubai, UAE. December 26-27, 2016.



2	Abass E.	rKLO8, a New Recombinant Protein of Leishmania Donovanii.	4 th Conference of Sudanese Society of Clinical Biology (SSCB). 4-6 December 2015 . Khartoum- Sudan.
3	Abass E, Elhussein M.	Visceral leishmaniasis and HIV co-infection in patients referred to Biomedical Research Laboratory of Ahfad University during 2003-2007.	Annals of Medicine and Healthcare Research. Proceedings of the 2 nd International Online Medical Conference, 2009 .
4	Elhussein D, Mahmoud A, Elsayed S, Abass E.	Gastrointestinal Parasite Infections among School Children in Displaced Areas. Annals of Medicine and Healthcare Research:	2 nd International Online Medical Conference 2009 .
5	Abass E, Ahmed AM, Yousif SM.	Rise in Antibiotic Resistance Seen in Urinary Isolates from Sudan.	1 st International Online Medical Conference, 2008 .
6	Ahmed AM, Yousif SM, Abass E.	Etiology and antibiotic resistance of uropathogens isolated from patients in Omdurman Teaching Hospital.	2 nd Scientific conference of Sudanese Association of Clinical Biologists in collaboration with the Arab Association of clinical Biology, 23-25 November 2007 , Khartoum, Sudan
7	Mansour D, Abass E, Mutasim M, Mahamoud AE, Harith AE.	Progress achieved in diagnosis of Visceral leishmaniasis using Direct Agglutination Test.	8 th Scientific Conference of the National Centre for Research, in collaboration with Federation of Arab Scientific Research Councils, 21-23 August 2007 , Khartoum, Sudan.
8	Abass E, Mansoor D, Harith AE.	Use of lymph node aspirate as a clinical specimen for specific detection of anti-Leishmania donovani antibodies: comparison with microscopy and serology.	8 th Scientific Conference of the National Centre for Research, in collaboration with Federation of Arab Scientific Research Councils, 21-23 August 2007 , Khartoum, Sudan.
9	Abass E, Harith AE, Mutasem M, Mansoor D, Aziz HA.	Diagnosis of visceral Leishmaniasis using an analogue DAT antigen in an ELISA format.	Conference on Endemic and Infectious Diseases in Sudan, Khartoum-Sudan. 2003 .



10	Mutasem M, Mansor D, Abass E , Harith AE.	Improvement of Direct agglutination Test (DAT) antigen for diagnosis of Visceral Leishmaniasis.	Conference on Endemic and Infectious Diseases in Sudan, Khartoum-Sudan. 2003 .
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Completed Research Projects

#	Name of Investigator(s) (Supported by)	Research Title	Report Date
1	Elfadil Abass, Lamya Yamani, Afnan Alsultan, Aisha Alamri, Sara Almousa, Mudathir Elbasheer, Hafiz Mohammed	Detection of asymptomatic Leishmania donovani infection among migrant workers in eastern region, Saudi Arabia.	2024
2	Manar Alzahrani, Elfadil Abass	Assessment of antibody response to Covid-19 vaccine and CCR5 delta mutation in previously infected individuals among Saudi population.	2024
3	Tahani Humdi, Elfadil Abass	Premarital Screening and Serological Status of Hepatitis B, Measles, Mumps and Rubella in women from Jizan, Saudi Arabia	2024
4	Fathelrahman Hassan, Elfadil Abass, Waleed Albuali, Afnan Al Sultan, Faisal Al-Zahrani, Dalal, Bubshait.	Genetic polymorphism in ribosomal protein genes (RPL5 and RPL9) and their correlation with the risk of thrombosis in Saudi population. 2019. Funded by Deanship of Scientific Research. Application number 2019-014-CAMS.	2021
5	Elfadil Abass	Up-scaling of Direct Agglutination Test (DAT): Production and Distribution at the Local Level.	2008.
6	Durria Mansour, Elfadil Abass.	Evaluation of β -Mercaptoethanol Enzyme-Linked Immunosorbent Assay to Diagnose Visceral Leishmaniasis in Eastern Sudan.	2006.

Current Researches

#	Research Title	Name of Investigator(s)
1	Surgical site infection following cesarean section in King Fahad Hospital of the University: Risk factors and Microbiological profile.	Aisha AlAmri, Elfadil Abass, Amani Alnimr.
2	Clinical Characteristics and Laboratory Finding in Covid-19 Patients: A Retrospective Cohort Study in King Fahad Hospital of the University	Shorooq Barnawi, Elfadil Abass, Afnan Alsultan, Sara Alwarthan.
3	Prevalence and Associated Risk Factors of Intestinal Parasite Infections: a 5-years Retrospective Study in Dammam, Eastern Province, Saudi Arabia	Walaa Al-Qahtani, Elfadil Abass



Contribution to Scientific Conferences and Symposia

#	Conference Title	Place and Date of the Conference	Extent of Contribution

Membership of Scientific and Professional Societies and Organizations

- British Society for Parasitology
- International Society for Infectious Diseases
- American Society for Microbiology

Teaching Activities

Undergraduate

#	Course/Rotation Title	No./Code	Extent of Contribution (no. of lectures/Tutorials. Or labs, Clinics)
1	Introduction to Microbiology	MLT 211	16
2	Immunology & serology	MLT 311	16
3	Clinical microbiology	MLT 314	16
4	Diagnostic Microbiology Rotation	MLT 421	8
5	Parasitology	MLT 322	16
6	Research Project	MLT 424	Thesis
7	Immunology	MLT 206B	40
8	Immunology	MLT 301B	40

Brief Description of Undergraduate Courses Taught: (Course Title – Code: Description)

Diagnostic Microbiology Rotation-421: Studies the clinical aspects of infectious diseases, including bacteriology, mycology, parasitology, and medical virology. The course includes specimen collection and handling, normal flora, and expected pathogens for various regions of the body. The course also examines the pathogenesis, clinical syndromes, epidemiology, treatment, and laboratory identification of each microorganism. Laboratory emphasizes the performance and interpretation of appropriate tests used to identify commonly encountered microorganisms in the clinical microbiology laboratory.

Clinical Microbiology-314: The course aims to introduce students to fundamentals of diagnostic microbiology. Emphasis will be placed on bacteriology techniques commonly encountered in the clinical laboratory including staining methods, sterilization, aseptic techniques, bacterial growth, morphology identification, understanding normal flora from



Guest/Invited Lectures for Undergraduate Students

#	Activity/Course Title and Code	Subject	College and University or Program	Date

Student Academic Supervision and Mentoring

#	Level	Number of Students	From	To

Supervision of Master and/or PhD Thesis

#	Degree Type	Title	Institution	Date
1				
2				

Ongoing Research Supervision

#	Degree Type	Title	Institution	Date
1	MSc	Development and application of an indirect ELISA for detection of anti-Leishmania specific IgG antibodies using recombinant kinesin proteins.	College of Applied Medical Sciences, Imam Abdulrahman Bin Faisal University	2023
2	MSc	Analysis of host gene polymorphisms among symptomatic and asymptomatic Covid-19 patients and controls in Eastern Saudi Arabia	College of Applied Medical Sciences, Imam Abdulrahman Bin Faisal University	2023
3	MSc	Assessment of the impact of interleukin gene polymorphisms on SARS-CoV-2 specific antibody responses and susceptibility to Covid-19.		2023
4	MSc	Evaluation of Antibody Responses to Recombinant Hepatitis B Vaccines Following Complete Immunization of Children and Adults in the Eastern Province of Saudi Arabia.		2024

Administrative Responsibilities, Committee and Community Service (Beginning with the most recent)



Administrative Responsibilities

#	From	To	Position	Organization

Committee Membership

#	From	To	Position	Organization
	2022	date	Member	Department Advisory Committee

Scientific Consultations

#	From	To	Institute	Full-time or Part-time

Volunteer Work

#	From	To	Type of Volunteer	Organization

Personal Key Competencies and Skills: (Computer, Information technology, technical, etc.)

1	Field work
2	Invention
3	University lecturing
4	Diagnostic test development
5	Gene cloning
6	Recombinant protein
7	Cell culture
8	Animal models

Last Update

7/9/2024