

## Summary page

**Name:** Prof. Naser Eldin Bilal  
(Pioneer of Medical laboratory Sciences in Sudan)

**Date & Place of Birth:** 01.01.1951, Abu Hugar, Sinnar State, Sudan

**Qualifications:** B.Sc, MPH(Micro), Dr. PH. (Micro)

**Present position:** Director General Central Laboratory, Ministry of Higher Education and Science Research, Khartoum. ([www.cenlab.edu.sd](http://www.cenlab.edu.sd)).  
Cum American Society of Microbiology (ASM) Country Ambassador to Sudan 2015 – 2020 ([www.asmtusa.org](http://www.asmtusa.org)).

**Teaching experience:** More than 18 years teaching medical students in Medical Colleges, Saudi Arabia (March 3, 1984 thru June 20, 2002). June 22, 2002-to date serving Khartoum University (F.M.L.S).

**Field of interest:** Diagnostic microbiology Epidemiology of infectious diseases

**Conferences:** Attended & Participated in more than 10 conferences abroad

**Publications:** 65 published papers in International Journals (American, Canadian, Scandinavian, British & African)

**Present Address:** Central Laboratory, Ministry of Higher Education and Science Research, Khartoum. ([www.cenlab.edu.sd](http://www.cenlab.edu.sd)).

**Telephones:** +249912926963

**E-mail:** [nasereldin2001@gmail.com](mailto:nasereldin2001@gmail.com)

---



## Personal Data

---

Name	Prof. Naser Eldin <b>Bilal</b> Mohamed* (Pioneer of Medical laboratory Sciences in Sudan)
Faculty	Director General Central Laboratory, Ministry of Higher Education and Science Research, Khartoum ( <a href="http://www.cenlab.edu.sd">www.cenlab.edu.sd</a> ), Tel: 0155885820, P.O.Box:7099. American Society of Microbiology (ASM) Country Ambassador to Sudan 2015 – 2020 ( <a href="http://www.asmus.org">www.asmus.org</a> ). (Former Dean Faculty of Medical Laboratory Sciences, University of Khartoum).
Department	Medical Microbiology
Nationality	Sudanese
Permanent address	Khartoum, Khartoum State, Sudan
Date & Place of birth	01.01.1951, Abu Hugar, Sinnar State, Sudan
Religion	Muslim
Marital status	Married with four children
Native Languages	Arabic
Other Languages	English

\*For publication Purposes the full name is NE Bilal

## Academic Qualifications

1. B.Sc. majoring bacteriology with Distinction (1991), College of Medical Laboratory Sciences, Khartoum University (Formerly Institute of Medical Lab. Technology, Faculty of Medicine, University of Khartoum – November 1975). Being top of my batch, I was awarded an incentive prize from the National Council for Research, Khartoum, Sudan, 1976.
  2. Master of Public Health (M.P.H.) majoring Microbiology with the grade of Excellent, in November 1983 from the Department of Microbiology, High Institute of Public Health (HIPH), Alexandria University, Egypt. Being top of my batch, I was awarded the department prize, Alexandria University, Egypt, 1982.
- “ **Title of Thesis:** “A study of bacteriuria among primary school children”.

**\* Please note that the first author’s full name for the purpose of publication is Naser Eldin Bilal**

3. Doctor of Public Health Majoring Microbiology, May 1990 from the Department of Community Medicine, Mansoura Faculty of Medicine, Mansoura University, Egypt.
- “ **Title of Thesis:** “Studies on the prevalence of brucellosis among humans and animals in the Asir Region of Saudi Arabia and the Arab Republic of Egypt using Immunological diagnostic techniques.

“ **Background of the Dr.PH thesis:**

The Dr. PH study consisted of three parts:

1. Assessment of the problem of brucellosis in a Saudi Arabian community at the Asir region using bacteriological (blood culture, typing of Brucellaisolates and performing their susceptibility testing) and serological procedures on 1331 subjects from 29 counties as follows :
  - a. 525 patients with pyrexia of unknown origin (P.U.O). All samples were subjected to culture and susceptibility testing using the procedures recommended by Stokes & Ridgeway (1980). All were also subjected to the standard tube agglutination test (STAT).
  - b. 350 subjects with symptoms associated with brucellosis but without fever.

- c. 456 apparently healthy subjects. All subjects in (b) and (c) were subjected to the Rose bengal plate and standard tube agglutination tests.
2. Assessment of the volume of animal reservoirs both in Saudi Arabia and Egypt on 456 milk samples using the milk ring test and the confirmatory whey tube agglutination test.
  3. Additional 337 patients with **P.U.O.** were examined to study the knowledge, attitude and practices towards brucellosis problem.
    - All reagents were obtained from FAO/WHO Brucellosis Centre, Weybridge, England. Serologic procedures were performed as described by Brinley-Morgan et al. 1981.

#### **Awards:**

1. Incentive award of the National Research Council. Khartoum, Sudan, 1976 (Best performance and top of the Batch).
2. Incentive award in Medical Mycology, Department of Microbiology, HIPH, Alexandria University, Egypt, 1982.
3. Certificate of merit from School Health, Ministry of Education, Asir region, Saudi Arabia for the years (1414, 1419, and 1421 H).
4. Certificate of merit from Abha Maternity and Teaching Hospital, Ministry of Health, Asir region, Saudi Arabia, June 2002.
5. Certificate of merit from Asir Central and Teaching Hospital (Referral Hospital), Asir region, Saudi Arabia, June 2002.
6. Certificate of merit from the College of Medicine and Medical Sciences, King Khalid University, Abha, Asir region, Saudi Arabia, June 2002.
7. Certificate of merit from the Sudanese Union of Medical Laboratory Sciences, Khartoum Sudan, 2010.
8. **The logo of the University of Khartoum.** Awarded by the **President** of the University at The First International Conference of the Post Graduate Studies on Medical and Health Research conducted at the Friendship Hall, Feb 25-27, 2011, Khartoum, Sudan.
9. **The logo of the FMLS, UofK from the College staff, 2013.**
10. Certificate of merit from the Union of Sinnar State people working in Khartoum State, the capital of Sudan, 2014 in the presence of Sinnar State Governor.
11. Incentive award from the Alumni of the graduates of the Faculties of Medical and Health Sciences on the occasion of The 6<sup>th</sup> Annual Conference of Medical and Health Studies, at the Faculty of Medicine, UofK, Feb 18<sup>th</sup>-22<sup>nd</sup>, 2015.
12. **The logo of the FMLS, University of Khartoum, by the Students and the graduates of the years 2010-2015.**

**13. Prestigious appointment by American Society of Microbiology (ASM) International Board** as Country Ambassador to Sudan, December 11, 2014 – June 30, 2017. Joining a growing network of 73 country ambassadors to foster dissemination of microbiological knowledge around the world, 1752N street, NW, Washington, DC. 20036-2804. Tel: 202-942-9380. Fax: 202-942-9328 E-mail: [international@asmusa.org](mailto:international@asmusa.org)

## Present position

### ***Nov 11, 2019 up to date.***

Director General Central Laboratory, Ministry of Higher Education and Scientific Research, Khartoum. ([www.cenlab.edu.sd](http://www.cenlab.edu.sd)). American Society of Microbiology (ASM) Country Ambassador to Sudan 2015 – 2020 ([www.asmusa.org](http://www.asmusa.org))

### ***2015 – 2020***

American Society of Microbiology (ASM) Country Ambassador to Sudan ([www.asmusa.org](http://www.asmusa.org))

### ***May 27, 2015 to Feb 17, 2020***

Director of the Central Research Laboratory, University of Khartoum.

### ***June 23, 2018 to Nov 4, 2019.***

Dean Faculty of Medical Laboratory Sciences (re-appointment for Second Round)

### ***March 8, 2010 through September, 2017***

Consultant and Chairman of the Medical Laboratories Constituency, National Council for Medical and Health Professions, Prime Council of Ministers [www.ncmhp.gov.sd](http://www.ncmhp.gov.sd)

## Employments

### ***June 23, 2018 up to date.***

Dean Faculty of Medical Laboratory Sciences (re-appointed for Second Term)

### ***May 1, 2017 to November 2017***

Director of the Technical Management of Laboratories (LABOTEAD), Univ. Of Khartoum  
E-mail: [labotead@uofk.edu](mailto:labotead@uofk.edu) - Tel: 0154928154

### ***May 27, 2015 up to date***

Director General of Central Research Laboratory, UofK.

### ***September 9, 2009 to May 19, 2015***

Dean Faculty of Medical Lab. Sciences U of K.

### ***October, 15, 2007 to Oct. 15, 2008***

On sabbatical leave at Nile College, Omdurman, Sudan.

([www.nileuniversity.edu.com](http://www.nileuniversity.edu.com))

### ***October, 15, 2007 up to date***

Coordinator of the Medical Laboratory Sciences Programme, Nile College  
([www.nileuniversity.edu.com](http://www.nileuniversity.edu.com))

**January, 2, 2005 to Sept. 9, 2009**

Chairman, Department of Medical Microbiology  
Faculty of Medical Laboratory Sciences, Khartoum University, Khartoum

**November 14, 2002 –up to date**

Professor of Medical Microbiology, U of K.

**June 22, to Nov. 13, 2002**

Associate Professor

Department of Medical Microbiology Faculty of Medical Laboratory Sciences  
Khartoum University, Khartoum, Sudan.

**March 3, 1984 to June 20, 2002**

Lecturer in Microbiology

Department of Clinical Microbiology & Parasitology  
College of Medicine & Medical Sciences, King Khalid University, Abha.

**1981 – 1983**

Study leave (Resigned) from Riyadh University for the study leading to a Master Degree  
(M.P.H.) at Alexandria University, Egypt

**1979- 1981**

Demonstrator, Department of Pathology & Microbiology, Faculty of Medicine, Riyadh  
University (Presently King Saud University), Saudi Arabia.

**1975 – 1979**

1. Teaching assistant (part-time ), Institute of Medical Laboratory Technology  
(Presently College of Medical Laboratory Sciences, University of Khartoum, Sudan)
2. Medical Laboratory Technologist (1975-1977), Department of Bacteriology, National  
Health Laboratory, Khartoum, Sudan
3. Senior Medical Lab. Technologist (1977- 1979), Institute of Tropical Medicine,  
National Council for Research, Khartoum , Sudan

## Academic and Other Activities

1. Full responsibility of preparing, setting, lecturing, tutoring, training and supervision of practical classes and assessment of the 3rd year medical students, Abha College of Medicine.
2. Active participation in Microbiology course (MIC 331). Participation includes preparation & conduction of lectures and students' assessment of the 3rd year medical students, Abha College of Medicine.
3. (1995-1997) Full responsibility of the whole bacteriology course (MIC 331) i.e. lectures' conduction and students' assessment of the 3rd year medical students, Abha College of Medicine.
4. Student academic adviser for Level Four medical students for the year 1413/1414H.
5. Member and Department representative of the College Purchasing Committee from 1985 through 1995.
6. Have helped in establishing Asir Central Teaching Hospital laboratory for diagnostic microbiology and have introduced new diagnostic tests in the field of brucellosis and Helicobacter pylori.
7. Have established University Clinic Laboratory, Abha Branch.
8. Served Abha Maternity Hospital, Asir Central Hospital (ACH) and Abha Branch University Clinic. Services include consultation and participation in the routine diagnostic services namely blood culture, CSF, body fluids, swabs, pus, sputum, faeces, biopsies etc.
9. Supervisor of the University Clinic Laboratory (Yahia Building) in addition to performing its routine lab. Diagnostic services.
10. Consultant and Chairman of Abha Maternity Hospital Microbiology laboratory (AMHL) from November 29, 1995 – June 22, 2002.
11. Infection Control Officer & Chairman of the Infection Control and Surveillance Committee in Abha Maternity Hospital from October 30, 1995 (18.06.1417) – June 22, 2002.
12. Coverage of routine diagnostic services on daily basis especially during MOH personnel's vacation.
13. On sabbatical leave (15.10.07 to 15.10.08) at the Nile college (Nile University Project) Omdurman city [nileuniv-edu.com](http://nileuniv-edu.com)

### • Contributions at Nile University College:

- A. Active & effective participation on writing & organizing the Medical Lab. Sciences

curriculum.

B. Active participation in all academic committees:

- a. Curriculum Committee
- b. Academic Programs Coordination Committee
- c. Library Committee
- d. Curriculum Monitoring Committee
- e. Admission Committee
- f. General Examination Regulation Committee
- i. Promotion regulations for academic staff committee.

C. Memberships at Nile University College:

- a. Member of the academic board
- b. Member of the academic advisory committee
- c. Chairman of the examination committee for all programmes (medical, medical laboratory sciences, nursing & medical informatics)
- d. Member of the academic advisory committee
- e. Member of the curriculum monitoring committee
- f. Member of the library committee
- g. Member of the Ethical Research Committee, Faculty of Medicine, Khartoum University 2009 up to date.
- h. Member of the Ethical Research Committee, National Public Health Laboratory Oct. 2013 to date, Khartoum, Sudan.

D. Other business at Nile University College:

- a. Acting academic secretary (7-10/4/2008)
- b. Acting academic secretary (22-28/6/2008)
- c. Acting academic secretary (12/10-02/12/2008)
- d. Teaching microbiology courses for Medical laboratory sciences & Nursing programs
- e. Attended and participated in a workshop on curriculum development on June 2008, Nile College.

14. Board member at FMLS, AlzaiemAlazhari University.

15. Board Member, Department of Medical Laboratory Sciences, Faculty of Health Omdurman Ahlia University, Sudan.

16. Board member at FMLS, International University of Africa.

17. Consultant and Chairman of the Constituency of Medical Laboratories, National Council for Medical and Health Professions, Ministry of Human Resources Development & Labor, Sudan (8th March, 2011 to date).

18. Member of the Technical Committee for Upgrading Faculties of Medical Laboratory Sciences (FMLS), Ministry of Higher Education and Scientific Research, Khartoum, Sudan (April, 2011 up to date).



19. Member of the Technical Evaluation Committee for proposed Faculties of Medical Laboratory Sciences (FMLS), Ministry of Higher Education and Scientific Research, Khartoum, Sudan (April, 2011 up to date).
20. Member and Chairman of Scientific Committee of the 1st International Conference of Medical Laboratory in Sudan, Friendship Hall, 6th – 8th December 2013 Khartoum.
21. Member of Technical Committee for Upgrading the Dept. of Medical Laboratory Sciences to Faculty of Medical Laboratory Sciences at Omdurman Ahlia University, General Directorate of Non-Government and International Higher Education and Scientific Research, Sudan, 2014.
22. Member and Chairman of The Technical Committee for Evaluation of the Curriculum of Wad Medani College of Medical Sciences and Technology (MST), General Directorate of Non-Government and International Higher Education and Scientific Research, Sudan, 2014.
23. Member and Chairman of The Technical Committee for Setting the Curriculum of proposed Faculty of Medical Laboratory Sciences, West Kordufan University, Ministry of Higher Education and Scientific Research, Khartoum, Sudan, 2014.
24. Academic Board member at the University of Science and Technology, Omdurman, May, 2015 up to date.
25. Member of the Board of Trustees, Nahda University College. [www.nahda.edu.sd](http://www.nahda.edu.sd) , [invo@nahda.edu.sd](mailto:invo@nahda.edu.sd)
26. Member of the Board of Trustees, Almadain College for Medical Sciences and Technology (ACMST).
27. Nominated for the president position of the German University in Sudan (GUS) 2016. This is a private educational Institution (see appendix).

## Teaching Experience

More than 18 years teaching medical students in Medical Colleges, Saudi Arabia (March 3, 1984 thru June 20, 2002).

June 22, 2002- to date:

Serving Khartoum University, Faculty of Medical Laboratory Sciences(FMLS) in teaching:

- 2<sup>nd</sup>, 3<sup>rd</sup>, 4<sup>th</sup>& 5<sup>th</sup> year students of FMLS.
- Qualifying year students (FMLS).

Part time teaching of:

- 4<sup>th</sup> year students, International University of Africa (Khartoum) from 2002 to 06.
- 2<sup>nd</sup>& 3<sup>rd</sup> year students of Medical Lab. Sciences, the Academy of Medical Sciences & Technology, Khartoum (2003- April 2004).
- Postgraduate students studying for M.Sc. degree in medical microbiology at Juba University (2005).
- Postgraduate students studying for M.Sc. degree in medical microbiology at the F,M,L,S, Al-Zaim El-Azhary University (2005 to 2010).
- Full time teaching post graduate for MSc by course students, FMLS, University of Khartoum 2011 till date.

## Community services

1. Training of staff working at Abha Food & Water Laboratory regarding microbiological investigations related to drinking water.
2. Representing the college in a committee supervising irrigation in the cities of Abha and Khamis-Mushayt.
3. Technical and scientific supervision of the team conducting microbiological tests of irrigation water in Abha and KhamisMushayt, specifically searching for possible contamination, its sources and relation to sewage.
4. Chairman of the Sudanese Community section at Abha and KhamisMushayt Cities, Southeast Region, Saudi Arabia, 1990-2001
5. Participation in microbiological testing (including special tests) of specimens during

- the outbreak of food poisoning in Abha. Lectures in the topic were also given.
6. Giving regular health education lectures together with department of community medicine regarding endemic diseases at the School Health Unit in Abha.
  7. Closely searching for and tracing nosocomial infections among patients, visitors and hospital staff and possible source in view of their prevention. Also, investigating the possible sources and modes of transmission, in addition to finding methods of prevention.
  8. During my deanship(2009-2015), I have established regular medical, health services and education program to serve our community at large in remote areas where there is lack or deficient medical health care facilities. This program is usually conducted during the annual vacation of Medical Laboratory Sciences Students. The last outreach program was named after me.– Professor Naser Eldin Bilal Campaign to Sinnar State It covered a total of about 4000 people in three localities during the period (2 – 9) January 2015. It is worthy to note that these 4000 people were provided with medical and laboratory investigations and treatment of the diseases diagnosed or detected for free.
  9. I was the first Dean to prepare and implement the MSc. by course Degrees in 5 disciplines in Aug. 1st, 2011, UofK.
  10. During my Deanship I also managed to change and design the existing Logo of the Faculty of Med. Laboratory Sciences (to be more representative of the history and activities), UofK Feb. 2015 (before the 6th annual conference on Medical and Health Sciences studies of the Graduate College, UofK Feb. 18th – 22nd, 2015, Khartoum, Sudan. Email :6conference@uofk.edu Website: www.uofk.edu.
  11. Founder of Biomedical Research Laboratory at the FMLS, UofK 2010.
  12. revise, reduce and up dated the MSc degrees by course to 3 semesters instead of 4 Semesters.
  13. Updated and changed the Bachelor Degree (modified annual system) into Credit hour system from 1st year through 5th (Honours) year.
  14. Establishment and hosting the Parasite Museum” at the FMLS, U of K which is the first of its kind in the Country.
  15. Establishment of the Insectory Unit at the Department of Parasitology and Medical Entomology, FMLS, U of K.
  16. Establishment of the solar energy project (phase 1) at the FMLS to provide the electricity for 5 Laboratories.
  17. Establishment the Faculty Greenery Projects. This include 314 Mango trees, >200 Lemon trees and 68 Banana trees (all for free).
  18. Improvement of the water supply in the faculty by connecting four-inch pipes.
  19. Establishment of the heritage village at the faculty.

## Research projects

### Executed Projects:

1. Brucellosis in the Asir Region of Saudi Arabia (see publications).
2. Health status of primary school boys at Abha, Asir region, Saudi Arabia. (Funded by the College of Medicine Research Centre, College of Medicine, Abha, King Saud University, Saudi Arabia.
3. Nosocomial infections in Asir region (see publications). (Funded by the College of Medicine Research Centre, King Khalid University, Saudi Arabia.
4. Have prepared a protocol for prevention and control of methicillin-resistant *Staphylococcus aureus* and *Klebsiellanosocomial* infections – A protocol that has been implemented in all the 16 hospitals of the Asir region, Saudi Arabia.

## Conferences

1. Represented the Dept. of Clinical Microbiology and Parasitology on the occasion of Health Week in Asir Region, April 7, 1984. A lecture on viral hepatitis was given.
2. Presented Two College Seminars:
3. Epidemiology of Brucellosis in the Kingdom of Saudi Arabia with special reference to Asir Region, 1985.
4. Diagnosis of Brucellosis, 1986.
5. Presented a public seminar on food poisoning in view of the last outbreak that had occurred in Abha in 1417H at Abha Maternity Hospital Theater on June 11, 1996 (25/01/1417).
6. Chairman of the Scientific Committee at the First International Conference on Medical Laboratory in Sudan, Friendship Hall, Khartoum. (6-9)<sup>th</sup> Dec. 2013  
[www.sudmls.com](http://www.sudmls.com)
7. The Sudanese-German Collaboration Forum on Higher Education & Scientific Research 7-9 March 2016 (member of the Medical and Health Committee).

8. Symposium on Brucellosis in Saudi Arabia held at Riyadh Armed Forces Hospital Riyadh, Saudi Arabia (Sunday and Monday) 22-23 September 1985.
9. Neurobrucellosis Symposium held at the College of Medicine, King Saud University, Riyadh, Saudi Arabia on 26 January, 1988.
10. Symposium on Living with diabetes in the present and future. Abha, Saudi Arabia, October 29th-30th, 1989.
11. The 6th National Symposium of the Saudi Oto-Rhino-Laryngology Society, Abha, Saudi Arabia, 22nd May 1997.
12. Actively participated in the Workshop on Writing Scientific Papers conducted by the British Council, United Kingdom – College of Medicine, King Saud University, Abha, Kingdom of Saudi Arabia, May 16-20, 1998
13. Actively participated in the Workshop on Writing of Research Proposals, Scientific Papers & Editing for Medical Journals conducted by WHO Regional Office for the Eastern Mediterranean – College of Medicine, Abha, Kingdom of Saudi Arabia, November 24-26, 1998.
14. Participated in the course on Data Handling: Use of SPSS for Windows conducted King Khalid University, College of Medicine, Abha, Saudi Arabia, British Council West Saudi Arabia and the University of Cambridge, held in Abha from January 25<sup>th</sup> to February 4<sup>th</sup>, 1999.
15. The 3<sup>rd</sup> International AIDS Symposium in Abha, Saudi Arabia. 20-23 June 1999.
16. Actively participated in Student Assessment Workshop on October 31, 1999, College of Medicine & Medical Sciences, King Khalid University, Abha, Saudi Arabia.
17. Actively participated in the Workshop on Research methods in Medical Education, December 5, 1999, College of Medicine & Medical Sciences, King Khalid University, Abha, Saudi Arabia.
18. Participated in a workshop on designing and conducting skill laboratory sessions on Wednesday, January 30, 2002, College of Medicine and Medical Sciences, King Khalid University, Abha, Saudi Arabia.

19. Attended and actively participated in the Staff Members Development Centre (SMDC) Programme of Khartoum University (Sept. 21- **Oct.** 23, 2003). The course comprises a total of 112 hours (92 h. Theory & 20 h. training in microteaching (Batch no. 22).
20. Attended a training course on Educational Planning at the Educational Development Centre for Health Professions (EDC), Faculty of Medicine, University of Khartoum (12th-17th November, 2005).
21. Attended a Workshop on the Cochrane Collaboration and Systematic Reviews, Faculty of Medicine, University of Khartoum on March 15<sup>th</sup>, 2006.
22. Attended a training course on Evidence Based Medicine held during the period from 18-21 March.2006 at (EDC) for Medical & Health Profession. Faculty of Medicine, University of Khartoum.
23. Attended and actively participated in the First Scientific Meeting of the Sudanese Society for Clinical Biology on “recent advances in the management of infectious and endemic diseases”, Friendship Hall, Khartoum 24<sup>th</sup> -27<sup>th</sup> November 2006.
24. Attended the pre-conference workshop on curriculum development held at Soba University Hospital, March 21-23, 2007 in the occasion of the Second International Conference in the Sudan.
25. Attended the pre-conference workshop on problem Based learning held at Soba University Hospital, March 21-23, 2007 in the occasion of the Second International Conference in the Sudan.
26. Attended the second international conference on Medical Education, Friendship Hall, Khartoum 24<sup>th</sup>-26<sup>th</sup> March, 2007.
27. Attended & participated in a Workshop on curriculum development 12, june, 2008 Nile College, Omdurman.
28. Attended and actively participated on curriculum development workshop at the Faculty of Medical laboratory sciences, Al Zaiem Al Azhari University (7-9/October/2008).

29. Attended the Training Program for Senior Administrative People of Sudanese Universities from November 4 to 14, 2012, at Yangzhou University, Yangzhou, Jiangsu Province, and P.R. China.
30. Attended & participated in Bioethics Workshop (Bioethics an interdisciplinary approach) Al-Sharijah Hall, University of Khartoum, Sudan, 11.3.2014.
31. Attended & participated in a Workshop on National Standards for Quality Assurance in Higher Education in Sudan from 16<sup>th</sup> to 18<sup>th</sup> June, 2014, Khartoum University Center for Advanced Training.
32. Active contribution on the 6<sup>th</sup> annual Conference on Medical and Health Sciences Studies – Community Oriented Scientific Research. Feb. (18<sup>th</sup> – 22<sup>nd</sup>) 2015, Khartoum, Sudan.
33. Attend and actively participated in Advanced Leadership and Administration Skills Workshop for Deans of Faculties at Khartoum University Center for Advanced Training, Khartoum, 22<sup>nd</sup>Aug., 2015.
34. Attend and actively participated on curriculumpreparation for the Faculty of Medical Laboratory Science, University of Al-Butana, Khartoum, 29<sup>th</sup> Feb., 2016 ( Website: [www.albutana.edu.sd](http://www.albutana.edu.sd)).
35. Attended & participated in The 6<sup>th</sup> International Joint Conference and Medical Ethicsand Professionalism, Police Club, Khartoum conducted by **Sudanese Medical Association, UK and Ireland**, 19<sup>th</sup> Dec, 2015.
36. Board member of the Scientific Committee at the 1<sup>st</sup> Conference on Importance of RNA/DNA Sequences and Bioinformatic Tools in the Development of Medical Microbiology Field, Duha Hall, Omdurman Islamic University (Speaker, Session chair and Chair of the Recommendation Committee) , 25-26, March 2017.
37. Attended &actively participated (speaker and session chair) in the First Conference on “Patient Safety and Ergonomics”, conducted at Dr. Abdelhamid Mahmoud Center for Training, Federal Ministry of Health, Khartoum during the period 23<sup>rd</sup> – 4<sup>th</sup>, April, 2017.
38. Participated in the SMSB CPD Assessment Workshop 2: MCQ Construction, Standard Setting and Psychometric Analysis on 24<sup>th</sup> Feb. and 3<sup>rd</sup> March 2018, equivalent to 8 CME credits.
39. Attended one day workshop on Work Stress Management at Khartoum University Center for Advanced Training designed for Deans, Directors and Administrative Personnel 11<sup>th</sup> Aug. 2018 ([www.kucat.uofk.edu](http://www.kucat.uofk.edu)).

40. Attended one day workshop on Time Management Skills at Khartoum University Center for Advanced Training designed for Deans, Directors and Administrative Personnel 18<sup>th</sup> Aug. 2018 ([www.kucat.uofk.edu](http://www.kucat.uofk.edu)).

## Supervision of students of fifth level year, (B.Sc. Honours Degree) Faculty of Medical Laboratory Sciences, Khartoum University

1. Maria Ibrahim Ishag. A study of different properties of Staphylococcus aureus strains isolated from healthy and non-healthy Sudanese people, 2003 (completed successfully with distinction & University Prize, FMLS, UofK).
2. AbdohKassemSaleh, Antibody titres for Salmonella organisms in Schistosomiasis patients in El-managil Irrigation Scheme, Gezera, 2003 (completed successfully with distinction & University Prize, FMLS, UofK).
3. DemianaTalaattanious. Aetiology of wound infections in Diabetic Patients, 2003 (completed successfully).
4. Omar M. Almafazy . Nasal carriage of Staphylococcus aureus in a Provincial community hospital, Khartoum, Dec. 2003. International University of Africa, Faculty of Pure & Applied Sciences, Dept. of Microbiology, Khartoum (Oct. 2003) (completed successfully).
5. Salah Sidique Adam & ImadEldin Osman, Prevalence of E.coli among pregnant diabetic women, Khartoum. Faculty of Pure & Applied Science, International University of Africa, Khartoum, Sudan, 2004 (completed successfully).
6. SamahAbdulRahmanAlsir. The prevalence of extended – spectrum B-lactamase producing E.coli in some hospitals in Khartoum state, July 2004 (completed successfully with distinction & University Prize, FMLS, UofK).
7. Randa Ahmed Mohamed. The relationship between urease-producing bacteria and renal stone disease in Khartoum State, July 2004 (completed successfully with distinction & University Prize, FMLS, UofK).



8. Mawahib Hassan Eldegail. Pharyngeal carriage of Streptococcus Pyogenes among school children in Khartoum State, July 2005 (completed successfully), FMLS, UofK).
9. Wala Omer MohamadEitayeb. Prevalence of Bacterial urinary tract infections in children between 2-10 years old. July 2005 (completed successfully), FMLS, UofK.
10. Nissren Mohamed. Bacterial aetiology of otitis media in Khartoum Hospital July 2004. (completed successfully with distinction & University Prize, FMLS, UofK).
11. Lina Abdalla M.A. Kafeel. Comparison between Ziehl-Neelsen, Kinyoun's cold and flouochrome staining techniques for the diagnosis of pulmonary tuberculosis. Sep, 2006 (completed successfully with distinction & University Prize, FMLS, UofK).
12. Amel Eltayeb Hassan. Nasal carriage of Gram-negative bacilli among hospital personnel at Khartoum Educational Hospital. Sept. 2006 (completed successfully with distinction & University Prize, FMLS, UofK).
13. Fatin Elzibersiddig. Comparison between culture and immunochromatography test in the of helicobacter pylori. (completed successfully with distinction). Sept. 2007.
14. Hanaa Ahmad Mohamed Osman. Catheter associated Urinary tract infection in Khartoum State Hospital FMLS, UofK (completed successfully with distinction). (Sept. 2007)
15. Sara El sheikh. Bacterial aetiology of diarrhoeal diseases in children in Khartoum city, FMLS, UofK. (completed successfully) Sept. 2007
16. Hind Mohammed Siddig, Nada Mohammed Azeem, Zainab Ahmed Osman. Antimicrobial activity of Cinnamon & zingiber (completed successfully with distinction) June, 2008 FMLS, UofK.
17. Ghada Yousif Mohammed, Samah Nour Eldin, Mona Eltaher Adam. Seroprevalance of brucellosis among workers in Soba Farm. (Completed successfully with distinction) June, 2008 FMLS, UofK
18. Ikram Eltaj Abdelshakour, Wafaa H. Bannaga and Alaa Elwasila Ahmed. Antimicrobial activity of Nigella sativa, FMLS, UofK 2010 (completed successfully).

19. AlaaM.Mohamoud ,Hanaa S. Albadawy and Samira MunirBolis. Inducible Clindamycin Resistance in Erythromycin Resistant Staphylococcus aureusAmong Hospital and ComunityMembers , FMLS, UofK, 2010 (completed successfully with distinction and University Prize)
20. Maram M. Hamed, HadeelAbderahman and Hajir M. Suliman. Comparison Between the DNA Sequencing method and Analytical Profile Index for Yeast Identifican, FMLS, U of K 2010 (completed successfully with distinction and University Prize)
21. Maram M. Abul-Rahim and Reem A. Awad. Prevalence of Methicillin ResistantStaphylococcus aureus(MRSA) Nasal Carriage Among Health Care Workers and Healthy Adults in Khartoum State, FMLS, UofK 2010 (completed successfully with distinction)
22. Mona SidahmedGharbawi&Rehab .AElsadigandWejdan.AOsman.Antimicrobial Activity of Aqueous Garlic Extract FMLS, UofK 2011 (completed successfully).
23. Aisha Y.A. Ibrahim, Ghanem M.GH. Mahjafetal. Antimicrobial Activity of Honey and *Nigella sativa* Against Selected Bacterial and Fungal Organisms, FMLS, Uofk, 2015.(completed successfully with distinction)

## Supervision of M.Sc. students

1. Mai Mohamed AbdElgadir, M.Sc. Bacterial etiology of otitis media in Khartoum Hospital, Faculty of Medicine, University ofJuba, 2005 (completed successfully).
2. Nahid Mohamed NurElgalil, M.Sc., Determination of *Staphylococcus aureus* nasal carriage in Khartoum State, Faculty of Medicine, University ofJuba, 2005 (completed successfully).
3. LubnaAbdallah Mohamed, M.Sc., Bacterial aetiology of diabetic wound infection in Khartoum Hospital. Faculty of Medicine, University of Juba, 2005 (completed successfully).
4. Mai Hassan Ahmed Dafaalla, M,Sc., Microbial aetiology of urinary tract infection in the elderly people in Khartoum State, Faculty of Medicine, University of Juba, 2005 (completed successfully).
5. Amal El-Hag Elawad, M.Sc., Bacterial aetiology of meningitis in children. Faculty of Medicine, University ofJuba, (completed successfully).

6. Rolla AbulGadir A. Nasir. Prevalence of *Candida albicans* among pregnant females in Khartoum Faculty of Medicine, University ofJuba, 2005. (completed successfully).
7. AbdelMonium Mustafa Elmakki. Antibiotic resistance of urinary tract infections; isolates in Khartoum, Faculty of Medicine, University ofJuba, 2005 (completed successfully).
8. Ayat Hassan Mahmoud. Bacterial aetiology of eye infection in Khartoum Hospital, Faculty of Medicine, University ofJuba, 2005 (completed successfully).
9. Magida Abbas Ibrahim. Bacteriological and molecular studies of methicillin-resistant *Staphylococcus aureus* in Eastern Province of Saudi Arabia. M.Sc., FMLS, Khartoum University. 2005 (completed successfully).
10. AbdallahKhogaliSuliman. Evaluation of antibody-coated bacteria in the diagnosis of pyelonephritis and cystitis. M.Sc., FMLS, Khartoum University. 2006 (completed successfully).
11. Amel Osman Hamid . Fungal spoilage of peanut butter”Dakwa” Khartoum State. Faculty of Public Health and Environmental Health, University of Khartoum, 2006 (completed successfully).
12. Mustafa Mohammed Osman, Bacterial etiology of diarrhoeal diseases in children under 5 years old in Omdurman city, F.M.L.S., AlzaeimAlazheri University, Nov. 2006, (completed successfully).
13. Nissren Mohamed Mahmoud. Bacterial aetiology of vaginal infections among pregnant and non-pregnant females, Omdurman hospital. FMLS. AlzaeimAlazheriUniversity .Jan .2008 ( completed successfully )
14. Muna Omer Elsidig, Bacterial etiology of Pyrexia of unknown origin at KEH, F.M.L.S., U of K. June, 2008 (completed successfully).
15. Sahar Mohammed, Bacterial aetiology of pyrexia in cancer patients, F.M.L.S., AlzaeimAlazhari University. June, 2008. (Completed successfully).
16. HajerEinazir Ibrahim, Anti microbial& wound healing activity of *Kigelia Africana* and *Guierasenegalensis*. FMLS, UofK2008 (completed successfully).
17. DimianaTalaatTanious. Seoprevalence of Syphilis among People Living with HIV/ AIDS Using Different Serological Tests, FMLS. AlzaeimAlazheri University, 2009 ( completed successfully )
18. ZeinabAbdein Abdel Aziz Microbial aetiology of vaginal and cervical infections among pregnant women in Omdurman Maternity Hospital (DAYAT). Omdurman , Khartoum state, FMLS, UofK. May 2010 (completed successfully).

19. FatmaAbdeen El-Bashir, Serologic and Molecular Detection of Hepatitis C Infection among Pregnant Women in Sabia, Gizan, Saudi Arabia, FMLS, UofK Sept. 2011 (completed successfully).
20. HanaaA.M.Othman Evaluation of reverse transcription Polymerase Chain Reaction Assay For Rapid Detection of Crimean Congo hemorrhagic fever
21. ( CCHF)Virus Isolates Recovered in Sudan, FMLS, and UofK June 2013 (completed successfully).
22. SamahAwadAbdulrahim Ali. Antimicrobial and wound healing activity of *Crontonzambesicus*, *Acacia ehrenberginae* and *Fonacretica*, FMLS,UofK, June 2013 (Completed Successfully).
23. AlaaMuhamadain A study on Nosocomial *Pseudomonas* Infections at Khartoum State Hospitals October 2013 (Completed Successfully).
24. Azza Bashir Alsheikh Mohammed. Control of Adenovirus Replication Using Micronas, FMLS, UofK, 2015 (Completed Successfully).
25. ShazaZeinAlabdien. Antimicrobial Resistance and Beta-lactamase Producing Gram-negative Bacilli in a Tertiary Care Hospital, Saudi Arabia, FMLS, U of K, 2015 (Completed Successfully).
26. Samira M. BolisMolecular Detection of Human Papilloma Virus Genotypes Associated with Focal Epithelial Hyperplasia In Children In Khartoum State, FMLS, U of K, 2016(Completed Successfully).
27. Mona El TahirSeroprevalence and molecular detection of Cytomegalovirus among leukaemic patients at Radiation and Isotopes Centre, Khartoum, Sudan, FMLS, U of K, 2016(Completed Successfully).
28. Rehab Ahmed Hassan, Association of *Helicobacter Pylori* with Gastric and OesophagealCancer in Sudanese Patients. (Complete Successfully).
29. MazinAbduElhassan Mustafa Sidahmed. Prevelance of Extended Spectrum Beta-lactamases (ESBLs) Producing Entrobacteriaceae from Intensive Care Units (ICUs) at Hamad Medical Corporation (HMC), Qatar, FMLS UofK, 2016 (Completed Successfully).
30. Roa Ahmed Elmomin. Diagnosis and Genotyping of *H.pylori* Among Infected Sudanese patients with GIT disorders, FMLS, U of K, 2016 (completed successfully).
31. Alaa M. M. Elhassan. Frequency of faecal carriage of multidrug resistant *E. coli* and *Klebsiellapneumoniae* among hospitalized patients and healthy volunteers,FMLS, U of K, 2016 (completed successfully).
32. AlnazierAltayeb, A. Abdalmahmoud, F. Mustafa. Bacterial Aetiology of Nosocomial Blood-stream Infection Among Children in Khartoum State,2016.

33. ZobidaAbdElgadir Ahmed, Tawsul Mohammed Eltayeb, Hind Aljaili Mohamed. Antibacterial Activity of Honey and *Acacia nilotica* Extract against AerobicBacteria Isolated from Diabetic Wound. FMLS,UofK,2018(completed successfully).
34. Sara Abdeljalil Zeenelabdeen , Samah Awad Abdurahim and **Naser Eldin Bilal**. Antimicrobial Activity of Cinnamon Bark Oil against Urinary Tract Infections Associated Pathogens. FMLS,UofK,2018(completed successfully)
35. Safa Siddig Mustafa. Susceptibility of Pseudomonas aeruginosa isolates to selected antibiotics at Khartoum State , Sudan. FMLS,UofK,2018(completed successfully)
36. Maha H. Dirar. Detection and characterization of Extended Spectrum  $\beta$ -lactamases Producing Enterobacteriaceae isolates from Some Hospitals at Khartoum State, FMLS, UofK, 2018(completed successfully).

## Supervision of PhD. Students

1. MoutasemElhadi Ibrahim Babiker: Class I Integrons and Multidrug Resistance Pattern Among *Escherichia coli* Isolates from Clinical Specimens in Sudan and Saudi Arabia, FMLS, U of K July 2012 (completed successfully).
2. MagzoubAbbassMagzoubAbdelgader: Prevalence and Characterization of Rotavirus Recovered in Khartoum State, Sudan, FMLS, UofK May 2013 (completed successfully).
3. Najwa Adam Mahmoud, The Role of Cytokines and Chemokines Polymorphism in Susceptibility to Tuberculosis and Mycetoma in Sudanese Populations, Khartoum State, Sudan, April, 2014 (Completed Successfully)
4. Ibrahim Hassan Khalid Mohamed. The Role of Human Cathelicin and Low Density Lipoprotein in Chronic Urinary Tract Infection, FMLS, UofK, July, 2014 (Completed Successfully).
5. Musa Abdalah Ali. Studies on Prevalence and Characterization of Antibiotics Resistance Among *Escherichia coli* and *Klebsiellapneumoniae*, FMLS UofK. July 2014 (Completed Successfully).
6. EldawBreimaSuliman Mohamed: Phenotypingand Genotyping of *Salmonella* Serotypes in Humans and Animals in Al-Obeid, FMLS, UofK August 2014 (Completed Successfully).
7. AymanMudawiNurain. Phenotypic and Genotypic Characterization of Bacterial Species Associated with Nosocomial Infections at Radio Isotope Centre, Khartoum, FMLS, UofK August 2014 (Completed Successfully).

8. Omer Mohammed Ali Ibrahim, Molecular characterization and evaluation and detection methods of methicillin resistant *Staphylococcus aureus* at Kosti and Rabak Hospitals, White Nile State, FMLS, UofK2015 (completed successfully).
9. Reem Eltayeb Mohamed Ahmed. Macrophage Migration Inhibitory Factor, Anemia and Malaria Among Pregnant Women at Medani Hospital, Sudan, FMLS, UofK 2015 (completed successfully).
10. Amged G Mostafa. Plasmodium Flaciparum Infections and its Association with Thrombophilia During Pregnancy at Medani Maternity Hospital Sudan, FMLS, UofK2015 (completed successfully).
11. Ammar Alalim, Naser E. Bilal, Complement Activation, Placental Malaria Infection and Birth Weight in an Area Characterized by Unstable Malaria Transmission in Central Sudan, FMLS, UofK 2016 (completed successfully).
12. Abdulrahman Mustafa Abdulrahman. Detection of Nosocomial Isolates Expressing an Extended Spectrum  $\beta$ -lactamase Phenotype in Port Sudan Teaching Hospitals, Red Sea Sudan, FMLS, UofK, 2016 (completed successfully).
13. Luai Osman Marouf. Detection of Mupirocin Resistant Gene and its Association with Some Virulence Factors among *Staphylococcus aureus* Isolates, Khartoum State. FMLS, UofK, 2017 (completed successfully).
14. Ahmed Mustafa Bashir Farah. The effect of *Helicobacter pylori* infection and Placental Malaria on Birth Weight Delivery at Medani Maternity Hospital, Central Sudan (completed successfully).
15. Borai Elsheikh Edriss. Molecular characterization of enteric pathogenic strains of *Escherichia coli*, FMLS, Al-Zaiem Al-Azhari University.
16. Inas Tag Elsir Aly Sabri. Comparison of Anti-Cyclic Citrullinated Peptide (CCP) with Rheumatoid Factor for early Differential Diagnosis and Prognosis of Rheumatoid Arthritis, FMLS, UofK.
17. Walaa Abdalah Omar. Molecular Epidemiology of Some Flaviviruses Isolated in Sudan.
18. Ghanim Eltahir A. Yousif. Molecular Identification and Characterization of Hepatitis B virus in Selected Sudan States.
19. Manal Abdalla Gumaa Osman. Molecular detection and characterization of macrolide, lincosamides and Streptomycin resistance among *Staphylococcus aureus* isolates from clinical specimens, Khartoum.
20. Amna Abuelgasim Albadri. Whole genome comparison of *Mycobacterium tuberculosis* clinical and laboratory strains among Sudanese infected patients, Khartoum state, Sudan.
21. Salma Abd El-Rahman Mohammed Moharrum. The role of host genetic factors in susceptibility to mycobacterial infection, Khartoum.
22. Ahmed Abdulkarim Ibrahim Suliman. Vaginal Microbiome of Sudanese Women in Health and Disease, FMLS, Gezira University.

23. Relationship between IFN-LAMBDA, IFN-GAMMA, IL-10, vitamin D level, viral load of hepatitis B virus and the Inflammation of the liver in hepatitis.
24. Maha H. Dirar Prevalence and characterization of Carbapenemase genes harboring Gram-negative bacilli: Enterobacteriaceae, pseudomonas and Acinetobacter species in selected hospitals at Khartoum State, Sudan

### External Examiner:

1. 5<sup>th</sup> year & M.Sc. students F.M.L.S. University of El-Neelain, 2005-2006., Nov., 2010.
2. 4<sup>th</sup> year students, F.M.L.S., University of Science & Technology, 2006, 2015 Faculty of Medicine & Health Sciences, Elimam Elmahadi University. Feb. 2007.
4. Faculty of Medical lab. Sciences, Alzaeim Alazhari University, Nov. 2007 to Nov. 2008, 2009 (under graduate & post graduate student).
5. MSc student Faculty of Medical Lab. Sciences, Univ. of Science & Technology Dec. 2008.
6. MSc, students Sudan Academy of Science, Jan.2011,2012.
7. PhD, students Faculty of Medical lab. Sciences, Alzaeim Alazhari University 2012.
8. PhD, students, Sudan Academy of Science, July, 2015.
9. 4<sup>th</sup> year and honors students, FMLS, University of Kordufan, 2016.
10. PhD, student, the National Ribat University (Nov. 2017, Aug. 2018, Apr. 2019, Apr. 2020).
11. PhD, student, Shendi University Jan 2018.
12. PhD, student, Sudan University of Science and Technology Feb. 2018, 2019.

## Published papers

1. Ibrahim, AIA, Awad, R, Shetty, SD, Saad. M. & **Bilal. NE**. Genito-Urinary Complications of Brucellosis. British Journal of Urology, 1988; 61: 294-298.
2. Raziuddin, S, **Bilal, NE** & Benjamin, B. Transient T-cell abnormality in a selective IgM- Immunodeficient patient with brucella infection. Clinical Immunology & immunopathology. 1988; 46; 360-367
3. El-Shoura, SM, **Bilal, NE**. et al. Detection of *Escherichia coli* in the naturally infected female camel tick *Hyalomma (Hyalomma)dromedarii* (Ixodoidea: Ixodidae), Internal. J. Acarol. 1990; 16(2): 63-66.

4. **Bilal, NE.** Jamjoom, GA, Bobo, RA, Aly, OFM & El-Nashar, NM. Brucellosis in the Asir Region of Saudi Arabia. Saudi Med. J. 1991; 12(1): 37-41.

5. **Bilal, NE.** Jamjoom, GA, Bobo, RA, Aly, OFM & El-Nashar, NM  
A study of the knowledge, attitudes & practice (KAP) of a Saudi Arabian Community towards brucellosis problem. Journal of the Egyptian Public Health Association. 1991; Vol. LXV1 ; NO. (1,2 ) : 227-238

6. Malik, GM, Al-Wabel, AA, Ahmed, MEBK, **Bilal, NE.** Shenoy, AK et al. Salmonella Infections in Asir Region, Southern of Saudi Arabia: Expatriates Implications. Annals of Saudi Medicine. 1993; 13(3): 242-245.

7. Ibrahim, AIA, **Bilal, NE.** Shetty, SD, Patil KP & Gommaa H. The source of organisms in the post-prostatectomy bacteriuria of patients with pre-operative sterile urine. British Journal of Urology. 1993; 72: 770-74.

8. El-Shoura, SM & **Bilal, NE.** Ultrastructure of negatively & positively stained *Helicobacter pylori*. Journal of Tropical Medicine. 1993; 2(4): 63-68.

9. Malik, GM, Al-Wabel, AA, Ahmed, MEBK, **Bilal, NE.** Shenoy, Ak et al. Pattern of antibiotic Sensitivity of Salmonella Isolates in Asir Region, Southern Part of Saudi Arabia. Saudi Med. J. 1994; 15(1): 48-51.

10. **Bilal,** et al. A study of group A beta-haemolytic streptococcal (GABHS) pharyngitis among school children in Abha. Journal of Tropical Medicine. 1994. Feb; 3(1): 79-83.

11. **Bilal,** et al. *Helicobacter pylori* (HP) in Asir Region. Journal of Tropical Medicine, 1994, Aug; 3(2): 107-114

12. **Bilal,** et al. Brucellosis among domestic livestock in the Dakahlia Governorate of Egypt. Journal of Tropical Medicine, 1994. Aug; 3(2); 53-56.

13. **Bilal, NE** Urogenital mycoplasma and bacteria in seminal fluids. Journal of Tropical Medicine (JTM) gastroenterology. hepatology and infectious diseases, 1994 , Dec; 3(3) 169-175.

14. Raziuddin S, M, E. El-Awad, Telmesani, **Bilal NE** and Mansour Al-Janadi. CD4 +Th2 Cell response cytokine production in bacterial meningitis. Journal of Clinical Immunology, 1995; 15(6) :338-348



15. El- Shoura S and **Bilal NE**. Case for the panel. *Helicobacter pylori* III ultrastructural detection of outer multicircular membranes of unknown origin and function. *Ultrastructural Pathology*. 1996; 20(6): 593-597.
16. Abolfotouh, M, **Bilal NE**, Ibrahim A. Badawi & Mostafa M. Ghieth. Throat culture screening for Beta-hemolytic streptococci among schoolboys in Southwestern Saudi Arabia. *Eastern Mediterranean Health Journal (EMHJ)*, WHO, 1996, Dec.; 2(3): 425-431.
17. Teklu B, **Bilal NE**, Ahmed Makeen. Acute *Mycoplasma pneumoniae* infections at Asir Central Hospital: a pilot study. *Journal of Hepatology, Gastroenterology and Infectious Diseases*, 1996, Apr; 4(2): 123-127.
18. **Bilal NE**, Ahmed MEK, Al-Knawy B, Al-Wabel AA and Foli AK, Antimicrobial susceptibility testing of *Helicobacter pylori* strains in Asir region of Saudi Arabia. *Journal of Hepatology, Gastroenterology and Infectious Diseases*, 1996, Dec.; 4(4): 41-45.
19. **Bilal NE**. Batouk A, Abu-Eshy S, Al-Ghamdi B and Al-Wabel AA. Antimicrobial effects of *Nigella sativa* on selected microorganisms. (Preliminary report). *Journal of Hepatology, Gastroenterology and Infectious Diseases*, 1996, Dec.; 4(4): 105-111.
20. Al-Knawy B, **Bilal NE**. El-Bagir, Al-Wabel, Foli A et al. Metronidazole-Resistant *Helicobacter pylori* strains among Saudi patients with dyspepsia. *Saudi Med J*. 1997, May-June; 18(3): 261-263.
21. **Bilal NE**, and Al Faiki YH. Antimicrobial activity of honey on selected microorganisms: a preliminary study. *Biomedical Research*, 1998; 9(1): 51-54.
22. **Bilal NE**. Nosocomial Infections in a Maternity Hospital, Saudi Arabia. *Biomedical Research*, 1998; 9(2) : 139-145.
23. **Bilal NE**. Aetiology of vaginal infections in a maternity hospital at Abha, Saudi Arabia. *Biomedical Research*, 1999; 10(1): 41-45.
24. Asindi A, **Bilal NE**. Fattini Y, et al. Neonatal septicaemia in Abha, southwest Saudi Arabia: prevalent bacterial agents and antimicrobial susceptibilities. *Saudi Med. J* 1999; 20(12): 42-46,
25. **Bilal NE** and Gedebou M. *Staphylococcus aureus* as a paradigm of a persistent problem of bacterial multiple antibiotic resistance in Abha, Saudi Arabia. *Eastern Mediterranean Health Journal (EMHJ)*, WHO 2000; 6(5/6): 65-71.

26. Al GhaithyAA, **Bilal NE**. Gedebou M & Weily AH. Nasal carriage and antibiotic resistance of *Staphylococcus aureus* isolates from hospital and non-hospital personnel in Abha, Saudi Arabia. Transactions of the Royal Society of Tropical Medicine & Hygiene, 2000; 94: 504-507.
27. **Bilal NE** & Gedebou M. Clinical and community strains of *Klebsiella pneumoniae* multiple and increasing rates of antibiotic resistance in Abha, Saudi Arabia. British Journal of Biomedical Science, 2000; 57: 185-191
28. **Bilal NE**. Gedebou M, Al-Mohayia MH. Gram-negative bacilli from hospital and non-hospital personnel: pharyngeal carriage, multi-drug resistance and extended-spectrum  $\beta$  lactamase in Abha, Saudi Arabia. Biomedical Research, 2001; 12(3): 251-258.
29. Saleh Al-Ghamdi, Messele Gedebou and **Bilal NE**. Nosocomial infections and misuse of antibiotics in a provincial community hospital. Journal of Hospital Infection, 2002; 50:115-121
30. **Bilal NE**. Gedebou M. Ghamdi S. Endemic nosocomial infections and misuse of antibiotics in a maternity hospital in Saudi Arabia. Acta Pathologica, Microbiologica et, Immunologica Scandinavica (APMIS), 2002; 110: 140-7.
31. Bahar AM, **Bilal NE**, E Skander MA. Brief communication: High vaginal swab cultures in normal and preterm Labor. International Journal of Gynecology and Obstetrics, 2004 (87): 145-146.
32. Maria Cirlan, Magida Saad, Gabriela Coman, **Naser Eldin Bilal**. Ah Magzoub Elbashier<sup>5</sup>, Deborah Kreft<sup>6</sup>, et al. International spread of major clones of methicillin resistant *Staphylococcus aureus*: nosocomial endemicity of multi locus sequence type 239 in Saudi Arabia and Romania. Infections, Genetics and Evolution 5 (2005): 335-339.
33. Ibrahim ME, **Bilal NE** and Hamid ME. (2012). Increased multidrug resistant *Escherichia coli* from from hospitals in Khartoum state, Sudan: African Health Sciences. 2012; 12(3): 368 – 375.
34. Ibrahim ME, **Bilal NE**, Magzoub MA and Hamid ME. Prevalence of extended-spectrum  $\beta$ -lactamases-producing *Escherichia coli* from Hospitals in Khartoum State, Sudan. Oman Medical Journal ,2013,28(2):119-123.

35. Ibrahim ME, **Bilal NE**, Magzoub MA. Alzuhairy A. and Hamid ME. Prevalence of Multidrug Resistant *Escherichia coli* Clinical Isolates from Sudan S.Med. J 2013; 34(3): 179 – 186.
36. Ibrahim ME, **Bilal NE**, Magzoub MA and Hamid ME. Distribution of Class I integrons and their effect on the prevalence of multi-drug resistant *Escherichia coli* clinical isolates from Sudan. Saudi Med J 2013;34(3):240-247.
37. Magzoub Abbas Mazoub, **NaserEldin Bilal**, Jalal Ali Bilal, OmranFadl Osman. Rotavirus infection among Sudanese children younger than 5 years of age: a cross sectional hospital-based study. Pan African Medical Journal 2013; 16(88):2519.
38. Hanaa A.M Osman, Kamal H. Eltom, Nasreen O. Musa, **Nasereldin M. Bilal**, etal Development and evaluation of loop-mediated isothermal amplification assay for detection of Crimean Congo hemorrhagic fever virus in Sudan. Journal of Virological Methods 190(2013) 4 – 10.
39. Zeinab A. Abdelaziz, Mutasim E. Ibrahim, **Naser E. Bilal**, Mohamed E. Hamid. Vaginal infections among pregnant women at Omdurman Maternity Hospital, Khartoum State, Sudan. The Journal of Infection in Developing Countries, 2014; 8(4):490-497.
40. Ibrahim ME, **Bilal NE**, Hamid ME. Comparison of Phenotypic Characteristics and Antimicrobial Resistance Patterns of Clinical *Escherichia coli* Collected From Two Unrelated Geographical Areas, Global Journal Health Science 2014;6(6) : 126-135, ISSN 1916-9736.
41. AbdoK.Salem, **Naser E. Bilal**, Ibrahim Mutasim Frequent carriage of invasive Salmonellae amongst patients infected with schistosomiasis in Sudan.. African Journal of Microbiology Research (AJMR), 2015 Feb 25;.9(8): 543-548, Article Number: 988227150759. ISSN 1996-0808. <http://www.academicjournals.org/AJMR>
42. Alaa MM, Hanaa SA, Samira MB, **Naser E. Bilal**,etal. Inducible clindamycin resistance and nasal carriage rates of *Staphylococcus aureus* among healthcare workers and community members, African *Health Science*; 2015 Sep 15 (3):861-867.
43. AmmarAlalim, **Naser E. Bilal**, Awad-ElkareemAbass, Elhassan M Elhassan, Ahmed AMohammed, Ishag Adam. Complement activation, placental malaria infections and birth weight in an area characterized by unstable malaria transmission in Central Sudan, Diagnostic Pathology, 2015; 10:49.

44. Amged G. Mostafa, **Naser E. Bilal**, Awad-ElkareemAbass, Elhassan M Elhassan, Ahmed AMohammed, Ishag Adam. Coagulation and fibrinolysis indicators and placental malaria infection in an area characterized by unstable malaria transmission in Centre of Sudan. *Malaria Research and Treatment*. Volume 2015, Article ID 369237, 7 pages. [Http://dx.doi.org/10.1155/2015/369237](http://dx.doi.org/10.1155/2015/369237)
45. AymenMudaweNurain, **Naser E. Bilal**, MutasimElhadi Ibrahim, The frequency and antimicrobial resistance patterns of nosocomial pathogens recovered from cancer patients and hospital environments, *Asian Pacific Journal of Tropical Biomedicine*. 2015;5 (12):1055-1059.
46. ReemEltayeb, **Naser E. Bilal**, etal. Macrophage migration inhibition factor and placental malaria infection in an area characterized by unstable malaria transmission in Central Sudan, *F 1000 Research* 2015,4:824-32 (doi:10.12688/ F 1000 research.7061.1)
47. Mazen AE, DevendraBansal, Asha AE, **NE Bilal**, etal. “Antimicrobial Susceptibility and Molecular Epidemiology” of Extended Spectrum beta-lactamase Producing Entrobacteriaceae from Intensive Care Units in Hamad Medical Corporation Qatar. *Antimicrobial Resistance and Infection Control (ARIC)*, 2016;5(4):1-6.
48. SamahAwadAbdulRahim,NaserEldinBilalMohamed and Aisha ZoheirALmagboul. In vivo antibacterial and wound healing activities of *Acacia ehrenbergiana*. *Mediterranean Journal of Biosciences* 2016, 1(14): 147-152.
- 49..SamahAwadAbdulRahim,Aisha ZoheirALmagboul and **NaserEldinBilal**Mohamed. Antimicrobial activity of *Croton zambesicus* ,*Acaciaehrenbergiana*, and *Fagoniacretica*. *National Journal of Advanced Research*. May 2016, 2(3): 16-20 (impact factor: RJIF 3.42)
50. Najwa A Mhmoud and **Naser Eldin Bilal**. Cytokines plasma level in Active Tuberculosis and Post Treatment in Sudanese Tuberculosis Patients. *International Journal of Scientific Progress and Research (IJSPR)*, Issue 95, volume 34, Number 01,2017 (ISSN:2349-4689) (impact factor: 3.963)
51. Najwa A Mhmoud and **Naser Eldin Bilal**. Interleukin 17 A and F single nucleotide polymorphism with tuberculosis in Sudanese population. *International Journal of Scientific Progress and Research (IJSPR)*, Issue 98, volume 34, Number 04, 2017 (ISSN:2349-4689) (impact factor: 3.963)

52. **NaserEldin Bilal**,AlnazierAltayeb, A. Abdalmahmoud, F. Mustafa. Bacterial Aetiology of Nosocomial Blood-stream Infection Among Children in Khartoum State: a pilot study, International Journal of Scientific Progress and Research (IJSPR), Issue 108, 38(01):2017 (ISSN: 2349-4689).
53. AbdAlfatahD,O, Mohammed D,E, **NaserEldin Bilal**, Shargi A,H. Antibacterial Activity of Fresh Garlic Extract Against Multi-drug Resistant Bacteria. International Journal of Scientific Progress and Research (IJSPR),(impact factor: 3.963). Issue 102, 35 (03):2017 (ISSN: 2349-4689).
- 54.Esraa Alawad, MawadaBabiker, Salma Alrsheed, **Naser Eldin Bilal**. Antibacterial Activity of Hibiscus sabdariffa Extract and its Oil Against Selected Bacterial Isolates. International Journal of Scientific Progress and Research (IJSPR),(impact factor: 3.963) Issue 102, volume 35, Number 03, 2017 (ISSN: 2349-4689).
55. Omer Mlbrahim, **N.E.Bilal**etal. Assessment of Methicillin Resistant *Staphylococcus aureus* Detection Methods: analytical comparative study. Pan African Medical Journal.2017; 27:281. doi:10.11604/pamj.2017.27.281.9016.
56. Magzoub Abbas Magzoub, **Naser E. Bilal** et al. Detection and Sequencing of Rotavirus among Sudanese Children. Pan African Medical Journal, Sep 2017; 28:87. doi : 10.11604/pamj; 2017.28.87.11008 ([http:// www.panafrican-med-journal.com](http://www.panafrican-med-journal.com)) ISSN: 1937-8688.
57. Ibrahim Hassan Babikir, Elsir Ali Abugroun, **Naser Eldin Bilal** et al. The impact of Cathelicidin, the Human antimicrobial peptide LL-37 in Urinary Tract Infections. BMC Infectious Diseases.2018;18:17.DOI : 101186/s12879017-2901-z
58. ZobidaAbdElgadir Ahmed, Tawsul Mohammed Eltayeb, Hind Aljaili Mohamed and **NaserEldin Bilal Mohmed**. Antibacterial Activity of Honey and *Acacia nilotica* Extract against AerobicBacteria Isolated from Diabetic Wound. EC Microbiology 14.7 (2018): 408-413.
59. Ahmed Mustafa, **Naser Eldin Bilal** et al. The Association between *Helicobacter pylori*Seropositivity and low birth weight in a Sudanese Maternity Hospital. Int J GynecolObstet 2018, 1-4. DOI :10.1002/ijgo.12641
60. Sara Abdeljalil Zeenelabdeen , Samah Awad Abdurahim and **Naser Eldin Bilal**. Antimicrobial Activity of Cinnamon Bark Oil against Urinary Tract Infections Associated Pathogens. European Journal of Pharmaceutical and Medical Research. (accepted , [www.ejpmr.com](http://www.ejpmr.com) ) EJPMR Impact factor:4.897;ICV 79.57 manuscript No. EJPMR/5532/5/2018 (October Issue)

61. Samira Munir Bolis, Magda Mahmmoud, Salah El din Gumma, **Naser Eldin Bilal**, Isam El Khidir, "Molecular Detection of Human Papilloma Virus Genotypes in Children with Focal Epithelial Hyperplasia in Khartoum State J.of virol. Sciences, 2019, 5: 86-96.

62. Omer M.A Ibrahim, **NaserEldin Bilalet al.** Coagulase Gene polymorphism of Staphylococcus aureus isolates from patients at Kosti Teaching Hospital,Sudan. Accepted at Access Microbiology. Ms.No.ACMI-D-19-00011R1([em@editorialmanager.com](mailto:em@editorialmanager.com)).

63. Dirar M, **Bilal N**, Ibrahim M E, et al. (March 13,2020) Resistance Patterns and Phenotypic Detection of  $\beta$ -lactamase Enzymes among Enterobacteriaceae Isolates from Referral Hospitals in Khartoum State, Sudan. Cureus 12(3): e7260. DOI 10.7759/cureus.7260

64. Elteleb G. Elnaim ... and Naser Eldin B. Mohamed. Association of thrombocytopenia, Urine malaria Antigens, and Blood Group with malaria Parasite Density among Sudanese Malaria patients at Sharg Al-Nile District in Khartoum State. Int. J. Adv. Res. Biol. Sci (2020). 7(3): 17-22. DOI: <http://dx.doi.org/10.22192/ijarb.2020.07.03.003>.

65. Maha H. Dirar, Naser Eldin Bilal, Mutasim E. Ibrahim, Mohamed E. Hamid. Prevalence of extended-spectrum  $\beta$ -lactamase (ESBL) and molecular detection of bla TEM, bla SHV and bla CTX-Mgenotypes among Enterobacteriaceae isolates from patients in Khartoum, Sudan. Accepted to PAMJ volume 37. Article number 213,03 Nov 2020. 10.11.11604/pamj, 2020, 37. 213.24988.

#### **Papers submitted for Publication:**

66. Tareg MSA, Fatima E, **Bilal NE**, Comparison between Nitro-blue tetrazolium broth microdilution method and standard tube macrodilution for susceptibility testing of some rapidly grower microorganisms.

67. AlaaBabikerYousif, ZobaidaAbdulgadir Ahmed, **Naser Eldin Bilal** et al. Prevalence of ESBLs among *E.coli* and *Klebsiella*species in three major hospitals in Khartoum state.

68. Mutasim E.Ibrahim, **NaserE.Bilal** Resistance Patterns and phenotypic detection of extended-spectrum B-lactamase,Ampc B-lactamases and carbanemases among Enterobacteriaceae isolates from referral hospitals in Khartoum state, Sudan. Polish Journal of microbiology.

69. Manal A. Gumaa, Abeer babiker Idres, Bilal N.E, Mohamed Ahmed Hassan. First insight into molecular basis identification of 16s Ribosomal RNA Gene of Staphylococcus aureus isolated from Sudan.

### **Puplished Books:**

1. **Naser Eldin Bilal.** Brucella in Saudi Arabia and Egypt: Diagnosis and Epidemiology. Saarbrucken, Deutchland / Germany, LAP LAMPERT Academic Publishing 2013 ISBN: 978-3-659-31057-7.  
Online shop at [www.get-morebooks.com](http://www.get-morebooks.com)

## **Professional Affiliations**

1. Member of the American Society for Microbiology (Membership No. 55452031) (1999 – 2006).
2. Active Member, New York Academy of Sciences.
3. Member of Brucella Group, Abha, Asir, Saudi Arabia (1995-2002).
4. Member and coordinator of Nigella Sativa Research Group (1995-2002).
5. Member and College Representative of the Sewage Farming Irrigation Control Committee (SFICC) both in KhamisMushayt town and Abha, the capital of Asir region (1995- June 2002).
6. Member of Safety Disposal of Medical Waste Committee (SDMWC), Abha Maternity and Teaching Hospital (1995- June 2002).
7. Member of the Continuous Education and Training Programme Committee at Abha Maternity and Teaching Hospital (1995- June 2002).
8. Participated in Part-1 examinations of the Saudi Board of Applied Basic Sciences in OB/Gyn., Saudi Council for Health Specialties, Year 1417. (A letter of appreciation was given).
9. Appointed by the Department of Clinical Microbiology & Parasitology as a coordinator for the preparatory phase of the course of the B.Sc Medical Laboratory Technology Programme in Abha Medical College on Wednesday March 5, 1997 (26.10.1417).
10. Regular, active and effective contribution in the annual School Health Education Programmes at Abha for continuous health education of the community. (Awarded certificates of merit on 1414, 1419 and 1421 H).

11. Member & College Representative in a committee for Control and Surveillance of adequate sterilization both in Ministry of Health & Private hospitals in the Asir region of Saudi Arabia from year (2000 – June, 2002).
12. Quoted in the 18th edition (2001) of Who's Who in the World (World-18, 28593482).
13. Peer reviewer to the Eastern Mediterranean Health Journal (EMHJ) in the year 2001. World Health Organization. Regional Office for the Eastern Mediterranean. P.O. Box 7608, NASR City (11371), Cairo, Egypt EMHJ1/330.R4/27/8.
14. Member and Department Representative in a sub-committee for the preparations for the commencement of the B.Sc. Medical Laboratory Program as regards teaching timetable and Basic Sciences Departments preparation plan – October 16, 2001. Abha Maternity and Teaching Hospital.
15. Consultant and Chairman of the Microbiology Laboratory, Abha Maternity and Teaching Hospital (AMTHML) from 1995 till June 20, 2002. (Awarded a certificate of merit).
16. Infection Control Officer & Chairman of the Infection Control and Surveillance Committee at AMTH from 1995 till June 20, 2002. (Awarded a certificate of merit).
17. Asir Central Hospital (ACH): In addition to active participation in routine diagnostic services, Dr. Bilal is providing consultation to clinicians and laboratory personnel in the field of diagnostic bacteriology (1990 thru June 20, 2002). (Awarded a certificate of merit).
18. Quoted in the 19th edition (2002) of Who's Who in the World (World-19, 28593482).
19. Member of the Academic Board of the Academy of Medical Sciences & Technology, Khartoum (2003- April 2004).
20. Reviewer to the Medical Lab. Journal Biannually Journal published by Al-Neelain University, Khartoum Sudan P.O. Box 12702 code 11121-Khartoum.
21. Member of Sudanese Association of Medical Education.
22. Member of the National Committee for the Evaluation of Sudanese Colleges of Medical Lab. Sciences, Ministry of Higher Education & Scientific Research, Khartoum, Sudan since June, 2004.
23. Member of Sudanese Association for Clinical Biology.
24. Faculty representative at the Medical and Health Campus Research Committee, University of Khartoum.



25. Faculty representative at the University library, UofK, Khartoum, Sudan.
26. Reviewer to the African Journal of Microbiology Research, 2008.
27. Member of the Board of Certification (BOC), American Society for Clinical Pathology (ASCP), Khartoum, Sudan 2012 up to date.
28. Consultant of the Laboratories at the Medical and Health services centre, University of Khartoum since 2012.
29. Invited as a National Curriculum Expert in workshop on the development of Medical Laboratory Sciences, FMLS, Gezira University, 2013
30. **Chair** of the Technical Committee for Evaluation of the Curriculum of Medical Laboratory Science Program, Wadmadani, College of Medical Science and Technology, General Directorate of Non-Government and International Higher Education, Khartoum, Sudan. P.O.Box 2801. 2013-2014.
31. Member and Chairman of the FMLS Program of the Curriculum Committee for Curriculum Preparation of MLS Program, West Kurdofan University, Sudan 2014.
32. Coordinator (Dean) of Medical Laboratory Sciences Program at Nile University College, Khartoum, Sudan up to date([www.nileuniversity.edu.com](http://www.nileuniversity.edu.com)) ([info@nileuniversity.edu.com](mailto:info@nileuniversity.edu.com))
33. Member of the National Committee for the Support of National Laboratories, undersecretary, Federal Ministry of Health, Sudan. 4/9/2014.  
Email: [undersecretaryfmoh@gmail.com](mailto:undersecretaryfmoh@gmail.com) Fax: +24983769928P.O. Box 303 Khartoum, Sudan.
34. Member of the College Board of FMLS, International University of Africa, since 2014.
35. Member of Evaluation Committee for PhD program at university of Sciences & Tech.
36. Member of the Promotion Committee at Animal Resources Research Corporation, Ministry of Livestock, Fisheries & Rangelands, Sudan E-mail: [infoarrc@yahoo.com](mailto:infoarrc@yahoo.com). 6 Street No. (1) Al-amarat - Khartoum 18<sup>th</sup>, Mar, 2019 up to date.
37. Member of Technical Committee for increasing no of students in take at Al-Fager University College.
38. **Chair** of the Electronic Curriculum Committee for Medical Laboratory Sciences at the Continuous Professions Development (CPD) Center, Federal Ministry of Health, Khartoum since 2012 up to date.

39. **Chair** of the Technical Committee for up-grading the Medical Laboratory Sciences program at Kurdofan University to Faculty of Medical Laboratory Sciences 12.June.2018 (approved on 03.09.2018).

40. **Chair** of Technical Committee for up-grading the Medical Laboratory Sciences Diploma program to BSc degree program, University of Kassala, 25.07.2018.

41. **Chair** of the Technical Evaluation Committee for evaluation of Bachelor Degree (Honours) in Medical Laboratory Sciences programs at the Universities and University Colleges for approval by Ministry of Higher Education and Scientific Research during the period from 2016 through 2019.

The evaluation includes: the curriculum review, infra- structure, facilities and human resources of the institution in question.

The programs include:

- a. Faculty for Medical laboratory Sciences,Al-Butana University.
- b. Almadain College for Medical Sciences.
- c. Gezira College for Medical Sciences and Technology, Khartoum State.
- d. Al-Hayatt College for Medical Sciences and Technology, Khartoum State.
- e. Napata College, Khartoum state.
- f. Aldaein University, DarFor State.
- g. University of Zalingei, DarFor State.
- h. Al-Manhal Academy of Sciences, Khartoum State.
- i. Gadariff University, Gadariff State.
- j. University of Garden City, Faculty of Medical Laboratory Sciences.
- k. Red Sea Univ. FMLS.
- l. AL-Manhal Academy of Science, Khartoum state.
- m. Zamzam University College , Khartoum State, December 2017
- n. IbnHayyan College of Science, Khartoum State, June 2018.
- o. Elfarabi College for Science and Technology, July, 2018.
- p. Gezira College of Technology oct, 2018.
- q. Academy of Engineering and Medical Sciences, 2018.
- r. Al Galam College for Science and technology, Omdurman,2019 ,
- s. MSc,PhD National University 2018.
- t. Higher Diploma, National University, 2019 FMLS.
- u. Al-Bahraim College, Blue Nile State June, 2019.
- v. Al-safowa College for Science and technology, Bahri, Aug, 2019.
- w. Health Sciences Academy 27<sup>th</sup> ,Aug,2019. FMH, Khartoum.

42. **Chair** of the Technical Committees that prepared the Curriculum for Bachelor (Honours) Degree for:

- a. Nile College (2007).

- b. MLS, Managil University Gezira State (2017).
- c. MLS, Darfor University College ,Nyala , Mar, 2018
- d. Nobles College for Science and Technology, Khartoum April 1, 2018.

43. Invited as a National Curriculum Expert at workshop on the development of Medical Laboratory Sciences, FMLS, Sudan International University at Salam Rotana Hotel, Khartoum, August 2016 and a certificate of appreciation was given.

44. **Chair** of the Technical Committees for the Evaluation of infra-structure and human resources of Al-Yarmok University College in order to increase the number of students in take. These include:

Bachelor of Medicine and Surgery, College of Pharmacy, College of Dentistry and Medical Laboratory Sciences programs, 2017.

45. **Chair** of the Technical Committees for the Evaluation of infra-structure and human resources of El-Sheikh Abdalla Elbadri University, River Nile State in order to increase the number of students in take.

46. **Chair** of the Technical Committee, Ministry of Higher Education and Scientific Research for evaluation of the infra-structure, facilities and human resources for the approval of MS.c and PhD degrees by Research for Faculty of Medical Lab. Sciences, University of Science and Technology.

47. Member of the Scientific Research and Innovation commission, Ministry of Higher Education and Scientific Research. Khartoum, Sudan 11<sup>th</sup>, Nov 2019 up to date ([www.mohe.gov.sd](http://www.mohe.gov.sd))

48. Country ambassador for the American Society of Microbiology (ASM) in Sudan for the years 2015 – 2017. Being a country Ambassador I have executed the events below:

**Executed Events:**

1- On 31.3.2015

- First General meeting for ASM ( introduction about the ASM and the role of country Ambassador)
- I utilized HIV virtual lecture created by Prof. Daniel Amsterdam of Buffalo University Conducted at the FMLS, University of Khartoum for more than 200 Faculty staff, microbiologists and students. For more information, please contact the International Program Coordinator, Kirsten Bartlett ([Kbartlett@asmusa.org](mailto:Kbartlett@asmusa.org))

2- On 12.9.2016

- I organized a free ASM Scientific writing and publishing virtual workshop for 200 scientists at the University of Science and Technology in Omdurman City, Sudan created by Dr. Roberto Kolter of Harvard Medical School. The workshop provided much-needed training to local scientists with ultimate goals of improving the dissemination of research and enhancing knowledge sharing. For more

information, please contact the International Program Coordinator, Kirsten Bartlett ([Kbartlett@asmusa.org](mailto:Kbartlett@asmusa.org))

3- On 19.11.2016

I organized a workshop on antibiotic susceptibility for 176 university students' faculty microbiologists and pharmacists at Sharja Hall, University of Khartoum. I utilized two virtual lectures from AAM Fellows: "Making Sense of Antimicrobial Susceptibility and Resistance testing results" by Dr. Daniel Amsterdam and "Basic Mechanisms of Antibiotic Resistance and Gene Spread" by Dr. Marilyn Roberts. The workshop provided valuable information to all participants, as "bacterial resistance is a major public health problem worldwide especially in developing countries like Sudan where medication is available all over the counter and people can get access to even without prescription. For more information, please contact the International Program Coordinator, Kirsten Bartlett ([Kbartlett@asmusa.org](mailto:Kbartlett@asmusa.org))

4- On 25-26, March 2017

The ASM Country Ambassador effectively participated at the 1st Conference on Importance of RNA/DNA Sequences and Bioinformatic Tools in the Development of Medical microbiology Field, Duha Hall, Omdurman Islamic University (speaker, session chair and chair of the Recommendations Committee

5- On Saturday 22, July 2017

I organized a workshop on Cholera for a total of 90 University students, faculty staff, microbiologists and MBBS students at Nile University College, ShargElneil locality, Khartoum State. Of the 90 subjects, 62 were ASM members who joined as a result of the activity and were registered for free via the Outreach program. The remaining 28 were ASM members renewed.

#### **The workshop addressed the points below:**

- How to join the ASM and the benefits from ASM membership.
- Overview on Cholera, aetiology, diagnosis and prevention.
- It also utilized a virtual video lecture on Ecology of *V. cholerae* and Cholera: Detection, prediction and prevention.

The event highlighted the importance of joining ASM and it strengthens the ties between university students and faculty staff with ASM.

49. Country ambassador for the American Society of Microbiology (ASM) in Sudan, first term May, 2015 to June, 2017.

50. ASM Country Ambassador second term Dec. 31, 2017-Dec. 31, 2020.
51. Member of the Board of Trustees, Nahda University College ([www.nahda.edu.sd](http://www.nahda.edu.sd))
52. Board Member of the scientific council of the University of Science and Technology Omdurman City, since 2014.
53. Member of the Board of Trustees, Almadain College for Medical Sciences and Technology (ACMST), Ministry of Higher Education and Scientific Research (Sunday 13,11,2016 up to date).
54. Member of the Central Promotion Committee at the General Administration of Private and Foreign Institutions, Ministry of Higher Education and Scientific Research since 3thof February 2017 up to date. ([www.mohe.gov.sd](http://www.mohe.gov.sd)), email: [prived@mohe.gov.sd](mailto:prived@mohe.gov.sd)
55. Member of the Board of Trustees, DarFor University College, Nyala, March 2018 up to date.
56. Member of the Follow-up and Evaluation Committee for infrastructure and human resources at the Private and Foreign Institution (colleges and universities), Minister of Higher Education and Scientific Research [www.mohi.gov.sd](http://www.mohi.gov.sd) Nov.30, 2020 up to date.
57. Member of the Medical and Health Studies Committee, National Council for Higher Education and Scientific Research [www.mohi.gov.sd](http://www.mohi.gov.sd) Feb.9, 2020 up to date.
58. Member of Faid El-Neel Charity Organization, Sharg Elneel, Khartoum North, Since 2019.
59. Consultant for the Laboratories Expansion Committee during COVID-19 Pandemic at the National Public Health Laboratory, Federal Ministry of Health, Khartoum, May 18<sup>th</sup>, 2020.
60. Member of the Consultancy Council of Abuhugar Alkhair Charity Organization, Abuhugar City, Sinnar State, Sudan. (Head quarter, Khartoum) since Sep, 2020.

**External assessor for Staff Promotion to the rank of Associate and full professor at:**

- a. Faculty of Medicine and Health Sciences, Elimam Elmahadi University, 2016.
- b. Faculty of Medicine Laboratory Sciences Al-Butana University, 2017.
- c. Faculty of Medicine Laboratory Sciences Karari University, 2017.
- d. Faculty of Medicine Laboratory Sciences Al-zaeim Alazhari University, 2018, 2020.
- e. The Central Veterinary Research Lab., Ministry of Livestock, 2018.
- f. Sudan University of Sciences and technology (two candidates) Aug, 2019.
- g. Abyan University, Republic of Yemen (1 associate professor, 2020).
- h. Shendi University, (1 associate professor, Aug, 2020) email: academic@ush.sd.
- i. Nile University, (associate professor 2 candidates), Aug, 2020.