

## Personal Details

Abd el Aziz Abd el Rahim Mohamed **AHMED**

Date of Birth: 14<sup>th</sup> December 1959

Place of Birth: El Dammer, River Nile State, Sudan

Nationality: Sudanese

Marital Status: Married, a father of two children

Present Post: Assistant Professor of

Parasitology and Director, Directorate for

Scientific Research and Cultural Relations,

University of Khartoum

Address: P. O. Box: 102 11111 Khartoum, Sudan

Laboratory: 83 – 797192

Office = 157832431

Mobile: 0915058895

Fax: 00249-11-780295 OR 00249-11-775108

Email Code: abdellazziz@hotmail.com

Residence: Buri, Staff Campus, University of Khartoum (13)

## Academic Qualifications

1. B.Sc. (Honours) – Zoology, University of Khartoum, 1985.
2. High Diploma – Bilharzia Control, Danish Bilharziasis Laboratory, 1990.
3. M.Sc. (Medical Entomology, University of Khartoum -World Health Organization, 1991.
4. High Diploma – Information Retrieval, University of Copenhagen, Faculty of Medicine, 1994.

5. High Diploma – Research Methodology, University of Copenhagen, Danish Bilharziasis Laboratory, 1995.
6. PhD (Bilharzia Epidemiology), University of Khartoum in collaboration with Johns Hopkins, 1998.
7. Certificate of Writing and Editing for Distance Learning (Health Education) – University of Cambridge & Solo, 1999.
8. Certificate of Identity Administration (Excellence Performance), League of Arabic States, Cairo, 2009.

## **community Services and National Contribution**

**(A) Popularization of Science and Cultural Programs:**

Coordinated and conducted 127 public scientific lectures in the "Scientific Cultural Program – University of Khartoum". These series of lectures were VDU documented within the frame of Popularization of Science.

Introduced the National TV Program "Ayaat Kawnia – Cosmetic Signs" for the Blue Nile TV, 30 episodes.

Introduced the TV Program "Science and Quran" for the National TV, 42 episodes in "Synchronization of Science and Holly Quran".

Arrays of TV meetings covering different areas of interest:

§ "Cloning: between Science and Religion"

§ Epidemiological situation and control of Bilharzia

§ Promises and constrains of scientific research

Introduced 32 public lectures in "Scientific views in Holly Quran" for Originality Affairs and Strategic Planning - Estishariat El Taaseel.

Festival Organization of "Creativity and Invention" that sponsored by Organization of scientific creativity and invention for Arab and African Youth, March 2003.

Seminar Organization of "Development of Education" that supported by Creative Thinking Center, for progress and Development, July 2006.

**(B) Establishment of Training and Research Laboratories:**

University of Khartoum:

**(I) Schistosomiasis Research Laboratory (SRL):**

- o Established in December 1998 in collaboration with Johns Hopkins University
- o Considerable group of postgraduates enjoying the SRL facilities - 53 M.Sc.

and PhD students from different faculties of University of Khartoum and other universities (Medicals, Zoologists, Botanists, Chemist, Physicists, Veterinary Medicine, Agriculture, socioeconomists).

- o The SRL supplies the aforementioned faculties with living teaching materials of

different tropical parasites, related pictorial forms and suitable electronics.

**(I) Data Handling and Statistical Analysis Unit (DHSAU):**

- o Established in November 2005 in collaboration with different institutes.
- o Many under- and postgraduate students from University of Khartoum and other national institutes utilized the recent computer packages of Data Handling and Statistical Analysis that installed in 12 computers of the DHSAU.
- o The computers and their accessories were provided by personal contacts with the Minister of High Education and the Minister of Science and Technology.
- o The software, including the statistical programs (SPSS, Statistix & Stata) and the pictorial form packages were purchased by Copenhagen University.
- o A Laptop, digital filed camera and multimedia purchased from personal resources.

**(I) Schistosomiasis Research Unit – SRU (Ribat University):**

- o Established in October 2006 – Ribat University.
- o The SRU is integrated with SRL (University of Khartoum) and Urology Department (Johns Hopkins Hospital) in Bilharzia Pathology Research, Bladder Cancer.
- o The Sudanese Scientific Board includes:

**Professor Hassan Abu Aa'sha (Urology – Ribat)**

**Professor Mustafa Idris El Basheir (Biochemistry – U of K)**

**Professor Ahmed Mohamed El Hassan (Histopathology – U of K)**

**Dr Abd el Aziz Abd el Rahim (Epidemiology/Control – U of K)**

**Dr Bushra Hussein (Ultrasound – Ribat)**

**Dr Gebreil El Numan (Community Physician – Ministry of health)**

**Dr Ahmed Basheir Ghalib (UT Surgery – Ribat)**

**Ishag Adam (Gynecology & Obstetrics – U of K)**

**Dr Lammyaa El Tash (Data Handling & Statistical Analysis – U of K)**

**(I) Quality Control Laboratory for Parasitic Screening:**

- o Established in May 2006 – Ministry of Health, Khartoum State.
- o Training of the health personnel in microscopic examination of urine and faecal samples, with emphasis on Bilharzia and intestinal parasites.
- o Efficiency monitoring of the health personnel engaged in epidemiological surveys and control programs of Bilharzia and STH.
- o Conduction of workshops and seminars for upgrading the relevant health personnel.

**(C) National Epidemiological Surveys:**

The postgraduates affiliated to Schistosomiasis Research Laboratory were well trained to conduct intensive integrated epidemiological surveys of Bilharzia (Parasitology, Malacology and Socioeconomy).

During the last six years, we have conducted sound surveys throughout the country excluding very few remote areas.

The valuable collected information from the 418 surveyed villages provided the baseline data to setup the priorities of the National Program of Bilharzia Control, Federal Ministry of Health.

Within the collaborative links of SRL, all infected villagers throughout the Country, were treated under medical supervision and intensive health education programs and community participation were successfully launched.

The SRL seriously trained many candidates from different Sudanese ethnic groups (Nuba, Denka, Hafaween and Zagawa) in control of Bilharzia and STH to ensure that message will get through, utilizing the local languages of the natives.

**(D) Parasitological Surveys of 33 Quranic “Khalwas”:**

Like above, epidemiological surveys were conducted for screening of intestinal parasites (protozoa and helminthic) among Quranic students.

A designed questionnaire was conducted for assessing the influential role of the knowledge, attitude and practice in transmission pressure of the parasites.

The finding reflected a desolated situation and all infected students were treated under medical supervision, in collaboration with Federal Ministry of Health.

**(E) Assessment of the Blue Nile Health Project (BNHP):**

The BNHP commenced its mission of controlling Bilharzia, Malaria and Diarrhea in some villages of the Gezira State, 1980 – 1990, with \$ 194 million.

No serious assessment was attained for the achievements of the project, which was terminated without a replacing body or even a final report.

The SRL conducted an intensive integrated epidemiological surveys of Bilharzia and STH in 33 villages of the BNHP, both villagers and school children.

**(F) Schistosomiasis Research Laboratory in Southern Sudan:**

The Bilharzia epidemiological surveys of the SRL extended to the accessible States of the South, like the Unity State, where alarming figures were obtained, but no previous figures for comparison.

The nominated health personnel from the relevant authorities were trained in Bilharzia aspects, from epidemiological surveys and microscopic screening to the integrated control approach and techniques.

Lundin Oil Company working in the South, requested the SRL for a survey, within Lundin Community Development and Humanitarian Assistants Program, but the escalation of violence forced the company to shut down its operation.

During (2006 – 2007) many Governors and Ministers of Health from the South visited the SRL and stressed that Bilharzia is a serious health problem and requested epidemiological surveys and training of their health personnel.

The Governor and Minister of Health of the Unity State, officially requested the

**Vice Chancellor, University of Khartoum, for the SRL scientific integrated services.**

**(G) Training Programs in SRL (U of K):**

University of Khartoum holds a premier place in the extensive higher educational system and pioneers community-oriented research. The planning of high quality research and of effective disease control requires sufficient and competent staff. The international health community well recognizes that there is still a lack of information regarding biomedical, epidemiological, socioeconomical, and human behavioural aspects of disease determinants. Our recent national epidemiological surveys (2000 - 2009) ensured that the situation of both Bilharzia and STH is desolated and very miserable throughout the country. In this way, concrete training in such fields is essential for reducing morbidity and mortality from such diseases. Many basic courses are crucially needed to promote better health through education, control programme and promote proper research. Arrays of training course were conducted to the health personnel and the postgraduates dealing with water-associated diseases, includes:

- q Parasitological & Socioeconomical Surveys**
- q Microscopic Diagnostic Techniques**
- q Malacological Surveys & Snail Control**
- q Research Methodology & Scientific Misconducts**
- q Health Education & Community Participation**
- q Data Handling & Statistical Analysis**
- q Scientific Reporting (Proposal - Thesis - Paper)**

**Technical Committees and Consultancies: Served as:**

- (1) Technical supervisor for 18 State Ministries of Health, Bilharzia Control.**
- (2) Chairman and reporter for 22 permanent and technical committees: University of Khartoum, Federal Ministry of Health, Ministry of High Education and Scientific Research, including:**
  - Postgraduate College Council**
  - Postgraduate Council, Medical & Health Sciences**
  - Postgraduate Council, Agroveterinary Sciences**
  - Postgraduate Council, Natural & Engineering Sciences**
  - Postgraduate Council, Humanity & Educational Sciences**

- International Conference, Postgraduate Studies & Scientific Research (U of K)

## **Membership of Academic, Scientific Societies and Committees**

1. Sudanese Society of Environment Conservation, 1984 – 2007.
2. Sudanese Society of Biotechnologists, 1988 – 2009.
3. High Technical Committee of Onchocerciasis, 1990 – 2005.
4. National High Committee of Bilharzia and Soil Transmitted Helminthes Control (Federal Ministry of Health), since 2000.
5. National Scientific Group of Sand flies and Leishmania Complex (Federal Ministry of Health), 1988 – 2005.
6. High Technical Committee of Bilharzia Research (Federal Ministry of Health), since 2000.
7. Initiator and Coordinator of the Scientific Culture Program (127 Public lectures – Popularization of Science – University of Khartoum), 2000 – 2007.
8. Initiator of the scientific research collaboration between University of Khartoum and Johns Hopkins University, USA, since 1998.
9. Membership of the High Committee of Distance Learning (University of Khartoum), 1990 – 2005.
10. Membership of the Coordination Committee of Bilharzia and STH Research (Ministry of Science & Technology), since 2003.
11. High Technical Committee of Bilharzia Elimination from (Khartoum State, Ministry of Health), since 2005.
12. High Technical Committee of “El Tumaanina” Charity Society (Medical Affair Arena), 2005 – 2007.
13. Membership of the Sudanese American Technical Committee of Reigniting of Medical Research in Sudan”, since 2005.
14. Membership of Medical and Health National Committee (Ministry of High Education and Scientific Research), 2006 – 2009.
15. Membership of Ethical Committee of Scientific Research (Ministry of High Education and Scientific Research), 2006 – 2007.
16. Membership of Scientific Committee of Community Medicine (Khartoum State, Ministry of Health), since 2006.
17. Founder and Program Secretary of the Sudanese Society of the Laboratory Equipment Users, 2006 0 2009.

- 18. Membership of the Faculty Board of the Faculty of Science, University of Khartoum, 2005 – 2007.**
- 19. Membership of the Academy Council, University of Medical Science and Technology, 1997 – 2005.**
- 20. Member of the University of Khartoum Senate, since 2006.**
- 21. Chairman and reporter for 22 permanent and technical committees: University of Khartoum, Federal Ministry of Health, Ministry of High Education and Scientific Research.**
- 22. Consultant for 18 State Ministries of Health, Bilharzia Control, Sudan.**

## **Professional Career & Posts Held**

1. **Research Assistant, Medical Research Council, (Michigan Laboratory, National Health laboratory), 1985 – 1986.**
2. **Teaching Assistant, Zoology Department, Faculty of Science, University of Khartoum, 1986-1990.**
3. **Lecturer, Zoology Department, Faculty of Science, University of Khartoum, 1991 – 1997.**
4. **Assistant Professor, Zoology Department, Faculty of Science, University of Khartoum, since 1998.**
5. **Dead Department of Human Biology, Preparatory College University of Medical Sciences and Technology, 1997 – 2005.**
6. **Consultant, Federal Ministry of Health – Bilharzia and Intestinal Helminthes Control Program, 2000 – 2009.**
7. **Fellow, Medical Research Unit, National Ribat University, 2006 – 2009.**
8. **Head, Sudanese American Scientific Group, Bladder Cancer and Renal Failure Related to Bilharzia, 2006 – 2009.**
9. **Deputy, Directorate of Scientific Research and Cultural Relations, University of Khartoum, 2006 – 2007.**
10. **Director, Directorate of Scientific Research and Cultural Relations, University of Khartoum, since 2007.**

## **Publications**

**(A) Scientific Papers (Journals) – 10 Papers:**

1. Ahmed, A. A; Babiker, A; El Tash, L.A. and Shiff, C.J. (2002). Development of a modified baited trap for detection of schistosome cercariae using natural oils rich in polyunsaturated fatty acids in Sudan. *Acta Tropica* (82), 363 – 368.
2. Ahmed, A. A. (2002). Assessment of cercarial rhythmicity and dynamics as microepidemiological factors influencing transmission pressure of schistosomiasis in Gunaid Scheme, Sudan. *Journal of Natural Sciences*, 3 (B): 117 – 132.
3. Ahmed, A. A. (2007). Schistosomiasis in Gunaid Sugar Cane Scheme, Sudan. *Journal of Natural Sciences*, 11 (B): 139 – 147.
4. Ahmed, A. A. Ahmed, S. A. (2006). Extracts of leaves and seeds of the Neem tree, *Azadirachta indica*, as environment-oriented molluscicides for combating schistosomiasis. *Proceedings of Workshop on African Freshwater Malacology*, 9-12 September 2003, Kampala, Uganda, pages 235-249.
5. Ahmed, A. A.; Ibrahim, N. A. and Idris, M. A. (2006). Laboratory studies on the prevalence and cercarial rhythms of trematodes from *Bulinus truncatus* and *Biomphalaria pfeifferi* snails from Khartoum State, Sudan. *Sultan Qaboos University Medical Journal*. Volume 6, No 2, page 56 – 69.
6. Khalil. M. Khalil, Atif E. Abdel Gadir, Mubarak M. Abdel Rahaman, Yassir, O. A. A. Ahmed; and Intisar E. Elrayah. (2007). Prevalence of toxoplasmosis in camel and camel herders in Sudan. *Journal of Camel Practice and Research*.
7. Ayoub A. Mohameda, Haider M. Mahgouba, Mamoun Magzoub, Gasim I. Gasimc, Walid N. Eldeina, A. A. Ahmed, Ishag Adamd. (2009). SHORT COMMUNICATION: Artesunate plus sulfadoxine/pyrimethamine versus praziquantel in the treatment of in eastern Sudan. *Transactions of the Royal Society of Tropical Medicine and Hygiene*. 1147, 1 – 3
8. AHMED; A. A. AFIFI and I. ADAM. (2009). SHORT COMMUNICATION: High prevalence of *Schistosoma haematobium* infection in Gereida Camp, in southern Darfur, Sudan. *Annals of Tropical Medicine and Parasitology*. Accepted 15 August 2009
9. Schistosoma mansoni infection as a predictor of severe anaemia 3 Q2 in schoolchildren in eastern Sudan. 2009. H.M. Mahgoub1, A.A. Mohamed1, M. Magzoub, G.I. Gasim, W.N. Eldein, A. A. Ahmed and I. Adam. *Journal of Helminthology*, 2960, 1 – 5.
10. Intestinal protozoa and intestinal helminthic infections among schoolchildren in

**El Dhayga, Central Sudan. 2009. Ahmed, A. A.; F. Abd el Mageida and I. Adam.**

**Sudan Medical Monitor, accepted.**

**Organization and Participation in Conferences and Workshops:**

**Contributed to over forty International, twenty Regional, and ten National conferences, seminars or symposiums. That contribution included physical attendance, presentation of papers, participation in the organization, and/or convening or chairing technical sessions. Forty of the papers presented to some of these conferences are listed under Publications.**

**(B) Organization and Participation:**

**11. Bushra, H. A.; El Kadaro, A.; Ahmed, A. A. and El Sayid, M. A. (2005). The Ultrasound Findings of Early Infection and Late Complications of Schistosoma haematobium, in the urinary bladder, Khartoum and Kordofan States. International Conference of "Prospects of Medical Research in Sudan" 29<sup>th</sup> November – 3<sup>rd</sup> December 2005, University of Khartoum, Sharja Hall.**

**12. Ahmed, A. A.; Karti, I; El Tash, L. A.; Osman, H. A.; Atilo, M.; Zakaria, M.; Abd el Rahman, M.; Abdeen, H. T.; Abd Allah, I. (2005). Recent Situation of Bilharzia in Sudan. International Conference of "Prospects of Medical Research in Sudan" 29<sup>th</sup> November – 3<sup>rd</sup> December 2005, University of Khartoum, Sharja Hall.**

**13. Ahmed, A. A.; Afifi, A. A.; Ahmed, S. A.; Abd el Gadir, M. and Abd Allah, O. (2005). Environment-oriented tools for combating Bilharzia in Sudan. International Conference of "Prospects of Medical Research in Sudan" 29<sup>th</sup> November – 3<sup>rd</sup> December 2005, University of Khartoum, Sharja Hall.**

**14. Ahmed, A. A.; Ibrahim N.A.; Abdeen, H. T. and Majid A. A. (2005). Factors influencing transmission pressure of schistosomiasis in Khartoum. International Conference of "Prospects of Medical Research in Sudan" 29<sup>th</sup> November – 3<sup>rd</sup> December 2005, University of Khartoum, Sharja Hall.**

**15. Karti, I; Ahmed, A. A. (2005). National Strategic Plan for Schistosomiasis and Soil Transmitted Helminthes Control. International Conference of "Prospects of Medical Research in Sudan" 29<sup>th</sup> November – 3<sup>rd</sup> December 2005, University of Khartoum, Sharja Hall.**

**16. Lado, G. and Ahmed, A. A. (2005). Epidemiological observations on urinary**

**schistosomiasis in some villages of the Nuba Mountains, Sudan. International Conference of “Prospects of Medical Research in Sudan” 29<sup>th</sup> November – 3<sup>rd</sup> December 2005, University of Khartoum, Sharja Hall.**

17. **Hussein, B.; El Kadaro, A.; Ahmed, A. A.; and El Sayid, M. A. (2005). Ultrasound findings of early infection and late complications of Schistosoma haematobium, Khartoum and Gezira States International Conference of “Prospects of Medical Research in Sudan” 29<sup>th</sup> November – 3<sup>rd</sup> December 2005, University of Khartoum, Sharja Hall.**
18. **Apogy, D.; El Tash, L. A.; Osman, O. F.; Malik, E. M; Awad, M. H. and Ahmed, A. A. . (2005). Prevalence of malaria infection among the displaced people in Soba (Khartoum State) and Magharba, Gezira State. International Conference of “Prospects of Medical Research in Sudan” 29<sup>th</sup> November – 3<sup>rd</sup> December 2005, University of Khartoum, Sharja Hall.**
19. **Afifi, A. A. and Ahmed, A. A. (2007). Some indigenous aquatic insects as biocontrol agents against different stages of schistosome vector snails, Sudan. International conference, Ministries of High Education and Science & Technology.**
20. **Ahmed, A. A. and Idris, M. M. and (2007). Biological variations in transmission potentiality of Bilharzia between albino Biomphalaria pfeifferi and the normal species. International conference, Ministries of High Education and Science & Technology.**
21. **Zakaria, M. S. and Ahmed, A. A. (2007). Transmission pressure of Schistosomiasis in some villages of Jebel Mara, Darfur Sates, Sudan. International conference, Ministries of High Education and Science & Technology.**
22. **Ahmed, A. A. (2003). New traps for detection of active swimming cercariae in contaminated waterbodies. International Conference of “Endemic and infectious diseases in Sudan” – World Health Organization” in collaboration with Federal Ministry of health, 5<sup>th</sup> – 8<sup>th</sup> May 2003, University of Khartoum, Sharja Hall.**
23. **Ahmed, A. A. (2003). Epidemiological situation of Bilharzia in sugar cane schemes, Sudan. International Conference of “Endemic and infectious diseases in Sudan” – World Health Organization” in collaboration with Federal Ministry of health, 5<sup>th</sup> – 8<sup>th</sup> May 2003, University of Khartoum, Sharja Hall.**
24. **Ahmed, A. A. Ahmed, S. A. (2003). Laboratory observations on the Neem extract as an environment-oriented molluscicide for combating Bilharzia. Workshop on African Freshwater Malacology, 9-12 September 2003, Kampala, Uganda.**

25. Taha, Z. B. and Ahmed, A. A. (2005). Biological Basis of Violence and Aggression. International Conference of Applied psychology and Peace Culture. 1 – 4 August, 2004, University of Khartoum, Sharja Hall.

**(C) Participation in Scientific Meetings – Oral Papers:**

26. Influential role of Health Education and Community Particip  
Bashair Taha, Khartoum Capital of Arabic culture, Ministry of Culture, 1<sup>st</sup> & 2<sup>nd</sup>  
Editions (2005).

4. Applied Biostatistics, University of Khartoum, (Final Revision).

5. Biology and Control of Bilharzia Snails, Tropical Medicine Research Institute,  
National Research Center, Sudan, (Finishing).

6. Schistosomiasis in Sudan(Historical Panorama & Recent Situation), IGRAA  
International Press, Federal Minister of Health, Sent it to Syria.

7. Emissions and Beats (Biology), Secondary Schools, Bin Jameel Cooperation (2000).

8. Biology of Honey Bees, National Research center, Sudan (Sent to Syria for Press)

## **Research in Progress**

- 1. Epidemiological mapping of Schistosomiasis in Sudan.**
- 2. Infection parameters of Bilharzia and intestinal helminthes in Jebel Mara and Nuba Mountains, Sudan.**
- 3. Skin lotion from oil seeds of Neem (*Azadirachta indica*) and Heglig (*Balanites aegyptica*) plants for protection against Bilharzia infection.**
- 4. Biological control of Bilharzia intermediate-host snails using their natural enemies in canalization system of the Sudanese sugar cane schemes.**
- 5. Field efficacy of the sesame oil and honey wax traps for detection of active swimming Bilharzia cercariae in contaminated waterbodies.**
- 6. Screening of snails unsusceptible to Bilharzia infection, an approach to be utilized as biocontrol agents.**
- 7. Natural diurnal rhythmicity of Bilharzia infective stage, a finding used as an application of control – villagers' health education.**
- 8. Field trials of molluscicides of plants' origin in naturally infected waterbodies, an approach of safe-oriented tool for combating Bilharzia.**
- 9. Ultrasound findings of early infection and late complications of *Schistosoma haematobium*, Khartoum and River Nile States.**
- 10. Effect of migration and population movement to Khartoum State on the epidemiological pressure of Bilharzia and intestinal helminthes.**
- 11. Bilharzia control in Khartoum State utilizing chemotherapy and health education supported by focal mollusciciding of contaminated waterbodies by human cercariae.**
- 12. Compatibility and susceptibility of snails to infection of Bilharzia from different States of Sudan – a study on the effect of migration to Khartoum on the transmission pressure.**
- 13. Variation in the biology of Albino *Biomphalaria* and its influence on Bilharzia transmission in agricultural schemes.**
- 14. Effect of Praziquantel drug on the genome of Bilharzia parasite reflected in the level of egg hatchability and cercarial infectivity.**
- 15. Microepidemiological observations on *Schistosoma haematobium* infection in El**

**Muzdalifa, El Hag Yousif, East Nile Area – Khartoum State.**

16. Renal failure and bladder cancer due to *Schistosoma haematobium*, Khartoum and River Nile States.

## **Teaching Experience (Academic Institutes)**

**(A) University of Khartoum:**

**Faculty of Medicine, Dentistry, Pharmacy & Science (1985 -2009):**

**= Introduction to Cytology, Histology, Reproduction and Embryonic Development)**

**Faculty of Science:**

**o Intermediate Year (1986- 2005):**

**(= Anatomy and Morphology of invertebrates and vertebrates)**

**o 3<sup>rd</sup> & 4<sup>th</sup> Years (1990 – 2009):**

**(=Protozoology - Biology, diagnosis, epidemiology and control)**

**o 5<sup>th</sup> Year (1990 – 2009):**

**(= Epidemiology and Control of Tropical Parasitic Diseases)**

**Faculty of Arts:**

**o 3<sup>rd</sup> & 4<sup>th</sup> Years, High Diploma and M.Sc. of Clinical Psychology (1991 – 2003):**

**(= Introduction to Biology of Behaviour and Physiological Psychology)**

**o M.Sc. of Translation (1991 – 2009):**

**(= Introduction to Science & Scientific Translation)**

**(B) Other Universities:**

**(1) Sudan University for Science & Technology:**

**Faculty of Education and Faculty of Medical laboratory Technology:**

**Preliminary Year:**

**)= Introduction to Cytology, Histology, Parasitology and Biology of Invertebrates)**

**(2) University of Medical Sciences & Technology (1985 -2007):**

**Faculty of Medicine – Dentistry – Pharmacy & Medical Laboratory:**

**Preliminary Year (= Introduction to Cell Biology, Histology, Protozoology, Helminthology and Medical Entomology)**

**(3) Ahfad University (1990- 1995):**

**Faculty of Medicine: (Preliminary Year):**

**(= Introduction to Cell Biology, Histology, Parasitology and Medical Entomology)**

**(4) Juba University (1985 – 1990):**

**Faculty of Medicine: (Preliminary Year):**

**(= Introduction to Cytology, Histology and Parasitology)**

**Faculty of Natural Recourses: (2<sup>nd</sup> Year):**

**(= Anatomy and Morphology of invertebrates and vertebrates)**

**(5) Dilleng University (1994 – 2002):**

**Faculty of Education: (1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup> & 4<sup>th</sup> Years):**

**(Introduction to Cytology, Histology, Protozoology, Helminthology, Biostatistics & Research Methodology)**

**(6) Islamic Omdurman University: (1988 – 1998)**

**Faculty of Medicine & Faculty of Science: (Preliminary Year):**

**(= Introduction to Cytology, Histology and Parasitology)**

**Faculty of Science: (2<sup>nd</sup> Year):**

**(= Anatomy and Morphology of invertebrates and vertebrates)**

**Faculty of Science: (3<sup>rd</sup> & 4<sup>th</sup> Years – Boys and Girls):**

**(= Protozoology and Helminthology)**

**(7) Gezira University:**

**Blue Nile Institute for Research and Training (2006 – 2007):**

**High Diploma & M.Sc Courses of Integrated Control of infectious Diseases**

**(= Medical Malacology and Entomology)**

**Promotion and Evaluation of Syllabi:**

**(A) University of Khartoum:**

**Faculty of Medicine – Dentistry – Pharmacy (Preliminary Year):**

**Introduction to Cytology, Histology, Reproduction and Embryonic Development**

**Faculty of Science (3<sup>rd</sup> & 4<sup>th</sup> Years):**

**Data Handling and Statistical Analysis I & II, Protozoology & Helminthology**

**Faculty of Science (5<sup>th</sup> Year):**

**Epidemiology and Control of Tropical Diseases**

**Faculty of Arts (High Diploma and M.Sc – Clinical Psychology):**

**Introduction to Biology of Behaviour**

**Faculty of Arts (M.Sc. – Translation):**

**Introduction to Science & Scientific Translation**

**(B) Other Universities:**

**(1) Sudan University for Science & Technology:**

**Faculty of Education and Faculty of Medical laboratory Technology**

**Preliminary Year) Introduction to Cytology, Histology, Parasitology and Biology of Invertebrates)**

**(2) University of Medical Sciences & Technology:**

**Faculty of Medicine, Dentistry, Pharmacy & Medical Laboratory**

**Preliminary Year (Introduction to Cell Biology, Histology, Protozoology, Helminthology and Medical Entomology)**

**(3) Ahfad University - Faculty of Medicine: (Preliminary Year):**

**Introduction to Cell Biology, Histology, Parasitology and Medical Entomology**

**(4) Juba University:**

**Faculty of Medicine: (Preliminary Year):**

**Introduction to Cytology, Histology and Parasitology**

**Faculty of Natural Recourses: (2<sup>nd</sup> Year):**

**Anatomy and Morphology of invertebrates and vertebrates**

**(5) Dilleng University (Faculty of Education):**

**Introduction to Cytology, Histology, Protozoology, Helminthology, Biostatistics & Research Methodology)**

**(6) Islamic Omdurman University:**

**Faculty of Medicine & Faculty of Science: (Preliminary Year):**

**Introduction to Cytology, Histology and Parasitology**

**Faculty of Science: (2<sup>nd</sup> Year):**

**Anatomy and Morphology of invertebrates and vertebrates**

**Faculty of Science: (3<sup>rd</sup> & 4<sup>th</sup> Years – Boys and Girls):**

**Protozoology and Helminthology**

**(7) Gezira University: Blue Nile Institute for Research and Training**

**High Diploma & M.Sc Course of Integrated Control of infectious Diseases**

**(Medical Malacology and Entomology)**

**Awards and Research Initiation:**

**Managed to get the following awards, grants and financial support:**

1. **International Prize – Academy of the third World, 2003, Italy.**
2. **A grant from the Medical Council, Federal Ministry of Health, Sudan, in collaboration with University of Michigan State, 1985-1986.**
3. **A grant from the World Health Organization, Medical Entomology & Vector Control, 1999.**
4. **A grant from the Danish Bilharziasis Laboratory, 1990, Bilharzia Epidemiology and Control, Blue Nile Health Project.**
5. **A grant from the DANIDA, 1994 – 1995, High Diploma, Research Methodology, Danish Bilharziasis Laboratory, Copenhagen, Denmark.**
6. **A grant from the DANIDA, 1994 – 1995, High Diploma, Information Retrieval, Faculty of Medicine, University of Copenhagen, Denmark.**
7. **A grant from the Ministry of High Education & Scientific Research, PhD Program, 1996 – 1998.**
8. **A grant from the University of Khartoum, Establishment of Schistosomiasis Research Laboratory, University of Khartoum, 1998.**
9. **A grant from the World Health Organization, cooperation with Johns**

**Hopkins University, upgrading of Schistosomiasis Research Laboratory, 2001.**

**10. A grant from the World Health Organization, socioeconomical aspects influencing transmission pressure of malaria and Bilharzia in Gezira and Khartoum States, 2000.**

**11. A grant from the World Health Organization, laboratory screening of natural enemies of Bilharzia snails – for their biological control, 2002.**

**12. A grant from the Ministry of High Education & Scientific Research, Neem as an environment-oriented tool for combating Bilharzia, 2004.**

**13. Malik Badri Prize (Psychology), The Sudanese Psychological Society – Best Published Textbook in Psychology, 2005.**

**14. Award of Ministry of Awqaf and Islamic Affairs, Kuwait. The eighth International Conference of Scientific Miracles in Holly Quran and Sunnah, 2006.**

**15. A medal from Suez University for Community Services, Egypt, January, 2009.**

**Supervision of Postgraduate Students:**

**(A) M.Sc. Thesis:**

**First supervisor of the following theses passed in fulfillment of Master Degree in Zoology (Parasitology: Epidemiology and Control):**

**1. Distribution of freshwater snails and transmission pattern of Schistosoma mansoni in a low endemic area in Gezira Irrigated Scheme, Sudan. Rihab Fath El Rahman, July, 1999.**

**2. Experimental control of schistosomes transmitting snail Biomphalaria pfeifferi by some aquatic microfaunal forms. Huda Abd el Rahim A/Mageid, September,2000.**

**3. Laboratory and field evaluation of biological and chemical control measures to control intermediate-host snails. Awadhia Ahmed El Mustafa, August,2001.**

**4. Studies on the ecology of snails and transmission of schistosomiasis in Gezira Scheme. Mohamed Taha Khalid Ahmed, March, 2002.**

5. **Distribution of fresh water snails in the field ditches (Abu Eshreens) and their role in the transmission of schistosomiasis in Gezira irrigated scheme. Tahani Nagm El Deen Hassan, April,2003.**
6. **A study of Schistosomiasis infection among the school children in Gezira. Nawal Nugud Mirghani, November, 2003.**
7. **Microepidemiological observations on transmission pressure of intestinal schistosomiasis in Jebel Mara Area, Darfur State, Sudan. Mohamed Zakaria Suleiman, December, 2003.**
8. **Laboratory and field observations on the control of schistosomes intermediate-hosts by some aquatic macrofaunal forms. Azam Abd el Aal Afifi, February, 2004.**
9. **Assessment of immunodiagnostic techniques for Schistosoma haematobium in females reproductive organs. Salli Mohamed El Fatih Abd el Malik, March, 2004.**
10. **Prevalence of toxoplasmosis in Khartoum State. Khalil Ahmed Khalil, December, 2004.**
11. **Laboratory evaluation of some molluscicides of plants' origin as an environment oriented tool for combating Bilharzia. Sahar Mohamed Ahmed Basheir, July, 2005.**
12. **Observations on transmission control of Schistosoma mansoni and intestinal helminthes infection in Gunaid sugar cane scheme, Gezira state. Asaad Galal El Deen, September, 2005.**
13. **Epidemiological Observations and Control Assessment of Schistosomiasis and Intestinal Parasites in El Seleimania Agricultural Scheme, River Nile State, SUDAN. Hanaa Abass Osman, December, 2005.**
14. **Epidemiological and control observations on Schistosoma haematobium Infection inDawar El Mahadi Agricultural Scheme, Khartoum State. Howeida Tawfeeg Abdeen, September, 2006.**
15. **Observations on microepidemiology of urinary schistosomiasis In Nuba Mountains, Dilling Province, Northern Kordofan State – Sudan. Gabreil Atilo Mashar, September, 2006.**
16. **Epidemiological Observations and Control Assessment of Schistosomiasis in the**

**Northern region of the Gezira Irrigation Scheme, Sudan. Yasir Abd el Mageid Suleiman, September, 2006.**

**17. School Health in Sudan and Saudi Arabia: A Comprehensive Study. Lammyaa Osman Basheir. Academy of Medical Sciences, December, 2006.**

**18. Biological observations on the differences between albino Biomphalaria pfeifferi and the normal species. Marwa Idris Mohamed, September, 2007.**

**19. Observations on the compatibility of Schistosoma and its intermediate hosts from different parts of the Sudan. Omeima Mohamed Abd Allah, December, 2007.**

**20. Observations on transmission and control of schistosomiasis in El Gezira agricultural scheme, Sudan. Ishtiaq Hassan Mohamed, January, 2008.**

**21. Observations on the natural infections of the schistosomes Intermediate-hosts and their seasonal transmission pressure. Nidal Mohamed Ibrahim, February, 2008.**

**22. Field observations on natural infections of intermediate-hosts of schistosomes and other trematodes and their seasonal transmission pressure in Gunaid Scheme. Hassan Ahmed Hassan Ahmed, September, 2008.**

**23. Laboratory evaluation of some molluscicides of plants' origin for combating Biomphalaria arabica and cercariae of Schistosoma mansoni in Taif Province, Kingdom Saudi Arabia. Khalid Hussein Abu Zeid, August, 2009.**

**24. Laboratory assessment of Neem lotion as protective weapon of Bilharzia control. Sahar Hamdi Ibrahim, Finishing Stage.**

**25. Epidemiological situation and Control Assessment of Schistosomiasis in the White Nile Irrigation Schemes, Sudan. Nagla Fathi, Finishing Stage.**

**(B) PhD Thesis:**

**26. Transmission of Schistosoma mansoni in New Halfa Scheme, Kassala State, Sudan. Modathir Abd el Rahman, November, 2006.**

**27. Microepidemiological factors influencing transmission pressure of schistosomiasis in Khartoum State, Sudan. Mohamed Zakaria Suleiman (PhD), Submitted.**

28. Epidemiological situation and transmission pressure of intestinal parasites among school children in River Nile State. Azam Abd el Aal Afifi, Submitted.
29. Strain variation of schistosomes from different States of Sudan. Mohamed Mobarak El Basheir, writing phase.
30. Isolation and characterization of molluscicidally active ingredients of the Neem (Azadirachta indica) Neem as an environment tool for combating Bilharzia. Raga Sati, Chemistry Department, writing phase.
31. Transmission of schistosomiasis in the Blue Nile State. Mohamed Taha Khalid Ahmed, in progress.

**Scientific Links (Research & Technical Cooperation):**

**(A) National Links:**

1. Faculty of Medicine, Community Medicine (University of Khartoum)
2. Faculty of Medical Laboratories (U of K)
3. Faculty of Veterinary Medicine, Molecular Biology Laboratory (U of K)
4. Faculty of Veterinary Medicine, Department of Parasitology (U of K)
5. Faculty of Economics – Health Economics Center (U of K)
6. Endemic Diseases Research Institute – Malaria Unit (U of K)
7. Faculty of Medical Laboratories (Nelein University)
8. Faculty of Medical Laboratories (El Azhari University)
9. Faculty of Science & Technology (International Africa University)
10. Faculty of Applied Science (Omdurman Islamic University)
11. Institute of Medical Radiology – (Ribat University)
12. Faculty of Medicine – (Ahfad University)

13. **Academy of Medical science & Technology**
14. **Blue Nile Institute for Research & Training (Gezira University)**
15. **Faculty of Science & technology (Shendi University)**
16. **Veterinary Research Center - Soba (National Research Center)**
17. **Institute of Medicinal & Aromatic Plants (National Research Center)**
18. **Tropical Medicine Research Institute(National Research Center)**
19. **Parasitology Department (National Health Laboratory – Federal Ministry of Health)**
20. **Sudan Institute of Natural Sciences (Ministry of High Education & Scientific Research)**
21. **National control Program of Bilharzia & STH (Federal Ministry of Health)**
22. **Control Program of Bilharzia & STH (Ministry of Health, Khartoum State)**
23. **Control Programs of Bilharzia & STH (Ministries of Health: Gezira, Senar, Gedarif, Blue Nile, Kordofan, Jongoli, Unity, River Nile, Northern, Kassala & White Nile)**

**(B) Regional and International Links:**

24. **Danish Bilharziasis Laboratory, Copenhagen University, Denmark.**
25. **Molecular epidemiology, Public Health Institute, Johns Hopkins University, USA.**
26. **Urology Department, Central Hospital, Johns Hopkins University, USA.**
27. **Institute of Tropical Medicine, Michigan University, USA.**
28. **Natural History Museum, Parasitology and Malacology, University of London.**
29. **Parasitology and Epidemiology Department, Natal University, South Africa.**
30. **Faculty of Medicine, Epidemiology Department, University of Sultan Qaboos.**
31. **Institute of Theodor Bilharz, Cairo, Egypt.**
32. **National Research center, Cairo, Egypt.**