

*Curriculum Vitae*  
**ALAA A. EL-Kholy**

**Full Name:** Alaa Abdel-Moneim Ahmed Abdel AaL EL-Kholy



**Nationality:** Egyptian

**Religion:** Muslim

**Date & Place of birth:** 9 / 9 / 1962 Cairo – Egypt

**Social Status:** Married and have five kids, active, cooperative, self-motivated and well educated.

**Mailing Address:** Veterinary Serum & Vaccine Researches Institute, ARC,  
P.O. Box: 131, P.C. 11381, Abbassia, Cairo, Egypt.

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**Permenent Address:** Nasr City, first region, 9<sup>th</sup> El-Batrawy St., Cairo, Egypt.

**Education:** - B. V. Sc.; May, 1985, Cairo University, Egypt.

- **Diploma** of "Livestock Diseases"; **Feb., 1989**, Cairo University, Egypt.

- **M. V. Sc.** (Infectious Diseases); **July, 1991**, Cairo University, Egypt.

**Thesis:** " **Some Studies on Foot and Mouth Disease in Calves in Egypt** "

- **Ph. D** (Infectious Diseases); **April, 1997**, Cairo University, Egypt.

Doctoral research was conducted at **Iowa State University (ISU)**, Ames, Iowa, **USA**  
(from July, 1994 to December, 1996).

**Thesis:** " **Molecular and Immunological studies on Bovine Viral Diarrhea Virus Infections in Cattle**".

- Completed a course of "**Health and Safety Instructions for Radioactive Isotopes** "; University of California

**UC- Davis**, California, **USA**, June, 1993.

- Completed a course of "**Introduction to DNA Manipulation** ", **UC- Davis**, **CA, USA**, September, 1993.

- Completed a course of "**Polymerase Chain Reaction Techniques**" at **UC- Davis**, **CA, USA**, Dec., 1993.

- Attended as audit " **Veterinary Biologies Training Program** " at the Institute for International Cooperation in

**Animal Biology ( IICAB )** at **ISU**, Ames, **Iowa, USA**, May-June, 1996 (personal communication).

#### **Principle Research & Interest :**

- Advanced Molecular & immunological characterization, pathogenesis and immune response of important viral and bacterial pathogens.

- Development of recombinant vaccines and rapid diagnostic tools for important viral and bacterial diseases, based on the recent molecular and immunological techniques.

#### **Awards & Prizes :**

- Awarded the **National Encouragement Award in Biological Sciences for 2002**, by the National Academy for Scientific Research and Technology, Egypt, in June 2003.

**Objectives:** - A broader opportunity to be a part of and a leader in Diagnosis & Control of Animal Diseases in Egypt. - Progressive and valuable accomplishments in the areas of Vaccinology, Diagnostics, Molecular Biology, Microbiology / Immunology that can solve as many as serious disease problems in our community.

#### **Career History :**

\* **Present Position :** - **Head** of the **Rinder Pest-Like Diseases** Dept., and the **Supervisor** of a new established **Lab** facility, namely, "**Viral Diagnostics Res. Unit**", at **VSVRI**, **Abbassia**, **Cairo**, Egypt. *Through this position I share a major role in the following:*

♣ I shared a **main role** in **selecting** and **importing** the **H5N2** vaccinal strain to **produce** and **evaluate** our local **Avian Influenza** vaccine (based on my comprehensive **genetic & molecular** analyses and my **personal** connections with **American** Institutions) as a step to control this disastrous virus infection in Egypt.

♣ I shared a **main role** in **rapid genetic and molecular characterization** of the **new foot-and-mouth virus type "A"** incursion to Egypt during **2006 outbreak**. That initiated the potential to **produce a bivalent vaccine** against types **O&A** for the first time and control of caused extensive economic losses among livestock in Egypt.

**Recently**, I have done my best to share a role in genetic identification of the **FMDV-SAT2 2012 outbreak**. That initiated the potential to properly **produce Trivalent vaccine** against types **O, A and SAT2** for the first time and control of caused extensive economic losses among livestock in Egypt.

♣ I shared a **main role** in **rapid genetic and molecular characterization** of the **Lumpy Skin Disease virus** during **2006 outbreak** that **helped** our authorities to **control the spread of virus** and the caused extensive **economic losses** among livestock in Egypt.

♣ **Workshops and training programs** held inside our institute and in other collaborative scientific institutions to teach my colleagues the most recent molecular techniques and to discuss with them the subject matter and recent tools for disease diagnosis and control (subunit & recombinant antigens and vaccines).

♣ **Organizing & writing research projects** that reflects my immediate scientific interaction towards important field problems. As **Currently**:

\* I successfully completed as a **Principle Investigator (PI)** a distinguished national project entitled: "**Construction and production of Marker Vaccines in Egypt, Model: the gE deleted BHV-1 vaccine and its companion diagnostic Kit**"; March 2012. The **outcome** of this project is currently in **Patent inventory**.

\* I professionally completed as a **Co / PI** as I have been taking all responsibilities from writing the project until final report approval of another national project entitled: "**Construction and production of a diagnostic ELISA Kit from non-structural recombinant proteins of FMDV to control FMD in Egypt**".

Both projects are sponsored (*L.E* 0.4 million each) by the Egyptian Academy for Scientific Research.

\* I shared as a successful **research Leader** until Feb. 2003 in another national project entitled: "**Development of recombinant vaccines for infectious bursal disease of chicken**".

♣ As a member of the Consultant Advisory Committee I shared in preparing NEPAD-CAADP BANKABLE PROJECT entitled: "**New approach for control of serious viral diseases affecting ruminants in Africa**".

♣ A member of the **Academic Advisory Committees** of many **Masters & Doctoral** Theses, in the fields of molecular diagnosis and vaccination of serious **viral & bacterial** diseases, at different University settings.

♣ A member of the Scientific Committee for preparing scientific files for registration of VSVRI biologics intended for export.

♣ A member of the Scientific Committee for evaluation of a new bovine respiratory vaccine "Pneumo Gene"

♣ Conducting molecular research projects, either individually or in a team that aim to solve animal disease problems in Egypt.

♣ I always keep in touch with colleagues of the international scientific community to share data and expertise.

♣ Lab instructions, technical advises and cooperative academic supervision to young researchers in and outside my institute.

#### **\*\* Previous Positions :**

▶ **A veterinarian** in a private Large Animal Clinic (1985) in Kerdasah, Giza , Egypt.

▶ **A veterinarian** in a private Rabbit Breed Farm (1985 - 1986) in EL-Nobarryia, Egypt

▶ **A veterinary specialist, research assistant and assistant researcher** in the **BCG** Researches & Production Unit, **Aerobic Bacterial Vaccines** Dept., and the **Bacterial Diagnostics** Dept., at the Veterinary Serum & Vaccine Research Institute (VSVRI), Abbassia, Cairo, Egypt, (1988 - 1994).

▶ **Assistant researcher, Researcher and Senior Researcher** in the **Genetic Engineering** Research Dept., VSVRI, Abbassia, Cairo, Egypt (1994 – 2003).

▶ **Senior Researcher and Cheif Researcher** in the **RPLD** Dept. (2003 - up to date).

▶ **A fellow** in the "**International Lab** of Molecular Biology for Tropical Disease Agents" at the Dept. of Pathology, Microbiology and Immunology, Vet. Med.. School, **UC-Davis, CA, USA**. Where, I have shared in projects on development of Recombinant **Vaccines** and **Rapid Diagnostic Kits** for Peste Des Petites Ruminants Virus (**PPRV**), during **1993-1994**.

▶ **Class Instructor** for a **Molecular Virology Class**, teaching and demonstrating to graduate and undergraduate students: isolation , purification , and gene mapping of nucleic acids (RNA & DNA) and the polymerase chain reaction at the **MIPM Dept., Iowa State University, Ames, IA, USA** (1995-1996 ).

▶ Shared a prominent role, as **a Committee Co-Advisor** or a **Lab and Technical Instructor**, helping many colleagues to accomplish their **Masters** and **Ph.Ds** research projects during **1989 – up to date**.

#### **Participation in Professional Meetings :**

♣ 2<sup>nd</sup> Sci. Cong., Vet. Med. Fac., Giza, Cairo Univ., Cairo, Egypt, (Paper), March 1992.

♣ 21<sup>st</sup> Arab Vet. Med. Congress, Cairo, Egypt, (Paper), April 1993.

♣ Intern. Meet. Sci., UC-D, Davis, CA, USA, November 1993.

♣ Confer. Res. Workers Anim. Dis. (CRWAD), Chicago, Illinois, USA, November 1994.

♣ 97<sup>th</sup> General Meeting of ASM, Miami, Fl, USA, (Abstract), May 1997.

♣ 24<sup>th</sup> Arab Vet. Med. Congress, Cairo, Egypt, (Paper), May 1999.

♣ 1<sup>st</sup> Sci. Cong., Vet. Med. Fac. of Beni-Suef, Cairo Univ., Al-Fayoum, Egypt, (Paper), Sept., 1999.

♣ 3<sup>rd</sup> Sci Confer. Vet. Med. Res., Vet. Med. Fac., Alexandria Univ., Alexandria, (Paper), Oct., 1999.

♣ 5<sup>th</sup> Cong., Egyptian Society for Cattle Diseases, Assiut Univ., Assiut, Egypt, (Paper), Nov., 1999.

♣ 5<sup>th</sup> International Congress of Veterinary Virology, Brescia, Italy, August 2000.

♣ 6<sup>th</sup> Sci. Cong., Vet. Med. Fac., Giza, Cairo Univ., Cairo, Egypt, March 2000.

♣ 25<sup>th</sup> Arab Vet. Med. Congress, Cairo, Egypt, (Paper) May 2001.

♣ 1<sup>st</sup> Internat. Sci. Cong., Genetic Eng. and Biotech. Div., Nat. Res. Center, March 15-17, 2004, Giza, Egypt.

- ♣ 7th Sci. Conf., Fac. Vet. Med., Zagazig Univ., June 15-17, 2004, Sharm El-Sheikh, Egypt. (Paper)
- ♣ 1st Confer. Virology, Egypt. Soc. Virol., Cairo University, Dec. 7-8, 2004, Giza, Egypt. (Paper)
- ♣ 4<sup>th</sup>. Intern. Sci. Conf., Mansoura Univ. & Teramo Univ. (Italy), Mansoura, Egypt, April 5-6, 2005. (paper)
- ♣ 4<sup>th</sup> Sci. Conf., Beni-Suef Univ., Fac. Vet. Med., 24-27<sup>th</sup> Sept., 2005. (paper)
- ♣ 7<sup>th</sup> Sci. Conf. Poultry, Egypt. Vet. Poultry Assoc., Sharm El-Sheikh, 6-9 March, 2006.
- ♣ 11<sup>th</sup> Annual Conf. Immunol., Egypt. Assoc. Immunol., Sharm El-Sheikh, Nov.29<sup>th</sup> – Dec.1<sup>st</sup>, 2006.
- ♣ 9<sup>th</sup> Sci. Conf. Fac. Vet. Med., Cairo Univ., Sharm El-Sheikh, 24-27 April, 2007 (paper).
- ♣ 4<sup>th</sup> International Conf. of the Vet. Res. Division, National Res. Centre, February 26-28, 2008, Giza, Egypt.
- ♣ 6<sup>st</sup> Sci. Conf., Vet. Med. Fac. of Beni-Suef, Cairo Univ., Ain El-Sukhna, Egypt, April., 2010.
- ♣ **11<sup>th</sup> Sci. Conf.**, Fac. Vet. Med., Cairo Univ., Hurgada, 15-18 May, 2011.

### **Research Activities & Publications:**

#### **A- Published researches:**

**1♦ "Immune response to foot and mouth disease (FMD) and BCG vaccination in calves challenged with FMD virus".**

*Authors:* Arab R., Abou-Zeid A., Omar A., Soufy H., El-Nakashly S. and Alaa. A. El-Kholy

*Published:* Proc.2<sup>nd</sup> Sci. Cong Vet. Med. Fac., Cairo Univ., 2-4, March 1992 , pp: 105-111.

(I have done all of the work as its part of my Master thesis).

**2♦ "Clinical studies on the effect of BCG in protecting calves challenged with FMD virus".**

*Authors:* Arab R., Abou-Zeid A., Omar A., Soufy H. and Alaa. A. El-Kholy

*Published:* Beni-Suef Vet. Med. J., Vol. 2, No. 1, pp: 92-104, 1992.

(I have done all of the work as its part of my Master thesis).

**3♦ "Effect of FMD and BCG vaccines on the blood picture of calves challenged with FMD Virus ".** Egypt. *Authors:* Arab R., Abou-Zaid A., Omar A., Soufy H. and Alaa. A. El-Kholy

*Published:* J. Path. and Comparat. Pathology. Vol. 1, No. 1, pp: 11-24, 1992.

(I have done all of the work as its part of my Master thesis).

**4♦ "Trial for enhancement of protection against Sunffles in Rabbits with BCG".**

*Authors:* Gergis S., Aboul Saoud S., Dimitri R., Afaf Monazia, El-Belkamy F., Alaa. A. El-Kholy and

Abdel Aziz M.

*Published:* Proc. 21<sup>st</sup> Arab Vet. Med. Cong., April 11-15, 1993 & J. Egypt. Vet. Med. Assoc. 53, No.1 & 2, pp: 221-226, 1993.

(I prepared the BCG used and also shared in other immunoassays).

**5♦ "Cloning and expression of the nucleoprotein of Peste des Petits Ruminants virus in Baculovirus for use in serological diagnosis".**

*Authors:* Ismail T., Yamanaka M., Saliki J., Alaa. A. El-Kholy, Mebus C. and Yilma T.

*Published:* *Virology*, 208, 776-778, 1995.

(I have done sequence analysis of the PPRV N gene and confirmed its cloning and expression in baculovirus).

**6♦ "Use of polymerase chain reaction to simultaneously detect and type bovine viral diarrhea viruses isolated from clinical specimens".**

**Authors:** Alaa. A. El-Kholy, Bolin S., Ridpath J., Arab R., Abou zeid A., Hammam H. and Platt K.

**Published:** *Rev. Sci. & Tech. Off. Int. Epiz.*, Vol.17 (3), Dec., 1998.

(I did all the work as its part of my Ph.D).

**7♦ "Biomolecular studies on caprine local isolates of *Pasteurella haemolytica*".**

**Authors :** Eman El-Rawy, Scham El-Zeidy, Alaa. A. El-Kholy and Amina El- Bayomi .

**Published:** *J. Egypt. Vet. Med. Assoc.*, Vol. 58, No. 3, Dec., 1998.

(I put the research idea & plane, did all protein profiles & western blots and shared writing).

**8♦ " Evaluation of protective immunity induced by a recombinant baculovirus expressing two structural proteins of bovine viral diarrhea virus in calves".**

**Authors:** Alaa. A. El-Kholy, Ghaly H. and Daoud A.

**Published:** *Egypt. J. Immunol.*, Vol. 6 (1), 1999, pp: 163-171.

(I put the research idea & plane, prepared recombinant vaccine, did the clinical & lab studies and all writing).

**9♦ "Molecular and immunological characterization of cross reactive antigens of some *Salmonella* serovars".**

**Authors:** Alaa. A. El-Kholy, Nahed Khamis, Amina El-bayomy and Hussein A.

**Published:** *J. Egypt. Vet. Med. Assoc.*, Vol. 59, No. 2 & 3, 1999, pp: 395-417. Proc. 24<sup>th</sup> Arab Vet. Med. Cong., Cairo, Egypt. (I put the research idea & plane, did all protien profiles & western blots & ELISAs and shared all writing).

**10♦ "Baculovirus expression of p14 and gp48 of the NADL strain of bovine viral diarrhea virus and utility for serodiagnosis".**

**Authors:** Alaa. A. El-Kholy, Bolin S., Ridpath J., Arab R., Abou-Zeid A., Hammam H. and Platt K.

**Published:** *Beni-Suef Vet. Med. J.* Vol. 9, No. 3-B (1999), pp: 491-511. Proc. 1<sup>st</sup> Sci. Cong. of Beni-Suef Vet. Med. Fac., Al-Fayoum, Egypt. (I did all work as it's a part of my Ph.D thesis).

**11♦ "Simultaneous infection with rabbit haemorrhagic disease virus and rabbit pasteurellosis in rabbit farms in Egypt".**

**Authors:** Ibrahim I., Abass A., Alaa. A. El-Kholy, Safia Kandil and Hussein A.

**Published:** *Alexand. J. Vet. Sci.*, Vol. 15, No. 3, pp: 567-578, 1999. Proc. 3<sup>rd</sup> Conf. Vet. Med. Res., Alex. Univ. Alexandria, Egypt. (I did viral and bacterial protein profiles and shared writing).

**12♦ "Comparative polymerase chain reaction assays for detection and genotyping of bovine viral diarrhea viruses in Egypt".**

**Author:** Alaa. A. El-Kholy

**Published:** Proc. of the 5<sup>th</sup> Sci. Cong., Egypt. Soc. For Cattle Diseases, 28-30 Nov., 1999, Assiut, Egypt, pp: 164-170. (I have done it all).

**13♦ "Evaluation of a recombinant ELISA antigen for serodignosis of bovine viral diarrhea virus in infected and immune cattle sera in Egypt".**

**Authors :** Alaa. A. El-Kholy, Ghaly H., El-Sabbagh M. and Samira El-Said

**Published:** *Vet. Med. J., Giza* Vol. 48, No. 2 (2000): 227 - 238.

(I put the research idea & plane, did it all except for animal vaccinations and virus challenge exposure).

**14♦ "Use of PCR and *In situ* DNA hybridization for detection of *Aeromonas hydrophila* infection in Nile Tilapia (*Oreochromis niloticus*)".**

**Autors:** EL-sayed E, Alaa. A. El-Kholy, Hashad M. and Abdel Haleem M.

**Published:** J. Egypt. Vet. Med. Ass., 61, No 3 : 177-189 & 25<sup>th</sup> Arab Vet. Med. Congress, Cairo, Egypt, May (2001). (I shared equally in all lab procedure and writing).

**15♦ "Molecular characterization of *Mannheimia haemolytica* extracts and utility in serodiagnosis of pasteurellosis in Egypt"**

**Authors:** Alaa. A. El-Kholy, Eman M. El-Rawy , Manal S. M. and Hussein A. Z.

**Published:** J. Egypt. Vet. Med. Ass., Vol. 64, No. 3, May (2004) : 321-343.

(I put the research idea & plane, did all antigens preparations, bacterial protein profiles, western blots, shared equally in immunoassays and almost all writing).

**16♦ "Molecular evaluation of some antigenic extracts of *Corynebacterium pseudotuberculosis* and utility in serodiagnosis"**

**Authors:** Alaa. A. El-Kholy, Aml M. El-Sawah and Elham A. El-Ebiary

**Published:** Proc. 7<sup>th</sup> Sci. Conf. Fac. Vet. Med., Zagaziq Univ. 15-17 June (2004), Sharm El-Sheikh, Egypt, pp : 177-189.

(I put the research idea & plane, did all antigens preparations, bacterial protein profiles, western blots, shared equally in immunoassays and did all of the writing).

**17♦ "An approach for improvement of the fowl cholera adjuvanted vaccine in Egypt "**

**Authors:** Nahed I.M.M. Khamis; Alaa. A. El-Kholy and Ahmed M. Daoud

**Published:** Vet. Med. J., Giza, Vol. 52, No. 4, October (2004) : 561-573.

(I put the research idea & plane, did all preparations of Lysate vaccine, bacterial protein profiles, shared equally in other vaccine formulations, immunoassays and did almost all of the writing).

**18♦ "Phylogenetic characterization of some bovine viral diarrhea viruses in Egypt"**

**Authors:** Alaa. A. El-Kholy, Vilcek S. and Daoud A.

**Published:** 1<sup>st</sup>. Confer. Virol., Egypt. Soc. Virol., Cairo Univ., Giza, Dec. 7-8, (2004) Egypt & Egypt. J. Virol., Vol. 1 (1), 2004 : 421-435.

(I put the research idea & plane, did all clinical specimens preparations, immunoassays, RNA extractions, RT-PCRs, computer-based sequence alignments and phylogenetic analyses and did all the writing).

**19♦ "Trials for preparation of combined inactivated respiratory virus vaccine containing BVD genotypes I & II, IBR, PI-3 and BRS viruses "**

**Authors:** Zeidan S. M., Samira S. T., El-Sabbagh M. M., Ghaly H. M., Abd El-Sameea A. \*, Iman K. A., and Alaa. A. El-Kholy

**Published:** 4<sup>th</sup> International. Sci. Conf., Mansoura Univ. & Teramo Univ. (Italy), Mansoura, Egypt, April 5-6, 2005: 433-445.

(I shared equally in all lab & animal procedure for vaccine preparation and evaluation and did all the writing).

**20♦ "Preparation of diagnostic Lysate antigens for rapid evaluation of the local Entero-3 vaccine"**

**Author:** Alaa. A. El-Kholy, Aml M. El-Sawah , Zeidan S. M., Wasel M. S. and Daoud A.

**Published:** 4<sup>th</sup> Sci. Conf., Beni-Suef Univ., Fac. Vet. Med., 24-27<sup>th</sup> Sept., 2005. & Beni-Suef Vet. Med. J., Vol. 15 No. 2, 2005 : 184-189.

(I put the research idea & plane, prepared all antigens, shared equally in lab assays and did all of the writing).

**21♦ "Molecular and immunological detection of BHV-1 in clinical specimens".**

**Author:** Alaa. A. El-Kholy

**Published:** *Egypt. J. Immunol.*, Vol. 12 (2), 2005, pp: 125-136.

(I have done it all).

**22♦ "Laser-Raman spectroscopy: A novel approach for sensitive molecular characterization of mycobacterium genomic DNAs"**

**Author:** Mona Abdel Aziz and Alaa. A. El-Kholy

**Published:** *Arab J. Biotech.*, Vol. 9, No. (3), October 2006, pp : 453-466.

(I put the research idea & plane, did all mycobacterium DNA procedure and, shared in the writing).

**23♦ "Genetic characterization of the Egyptian vaccinal strain Abu-Hammad of BHV-1"**

**Authors:** Alaa. A. El-Kholy and K. A. Abdelrahman

**Published:** *Rev. Sci. Tech. Off. Int. Epiz.*, Vol. 25 (3), Dec., 2006, pp: 1081-1095. (Research idea & plane, did all sequencing and phylogenetic analyses, shared equally in all lab procedure and did all of the writing).

**24♦ "Genetic identification of the foot-and-mouth disease virus caused 2006 outbreak in Egypt"**

**Author:** Alaa. A. El-Kholy, Hatem M. T. Soliman , Noha A. Helmy and Adel O. Abdel Rahman

**Published:** *Arab J. Biotech.*, Vol. 10, No. (1), January (2007), pp : 193-206.

(I put the research idea & plane, did all sequencing and phylogenetic analyses, shared all RT-PCRs and all of the writing).

**25♦ " Preparation and preliminary evaluation of a lysate *E. coli* vaccine in poultry".**

**Author:** Noha A. Helmy, Alaa. A. El-Kholy, Aml M. El-Sawah, Abu Elsoud S. and Adel O. Abdel Rahman

**Published:** 9<sup>th</sup> Sci. 1<sup>st</sup> Internat. Conf., Fac. Vet. Med., Cairo Univ., Sharm El-Sheikh, 24-27<sup>th</sup> April, 2007.

(I put the research idea & plane, did all preparations of Lysate vaccine and shared equally in other experiments)

**26♦ " Molecular typing of a new foot-and-mouth disease virus in Egypt "**

**Author:** Alaa. A. El-Kholy, Hatem M. T. Soliman and Adel O. Abdel Rahman

**Published:** *Veterinary Record*, (2007) 160, 695-697.

(I put the research idea & plane, did all sequencing and phylogenetic analyses, shared all of the writing).

**27♦ "Recent Introduction of Foot-and-Mouth Disease Virus Serotype A into Egypt"**

**Author:** N. J. Knowles,\* J. Wadsworth,\* S. M. Reid,\* K. G. Swabey,\* Alaa. A. El-Kholy,† A. O. Abd El-Rahman,† H. M. Soliman,† K. Ebert,\* N. P. Ferris,\* G. H. Hutchings,\* B. Statham\* , D. P. King\* and D. J. Paton\*

**Published:** *J. Emerging Infect. Dis*, Vol. 13, No. 10, October 2007 pp: (1593-1596).

(I shared a main role in all sequencing and phylogenetic analyses of local isolates and shared in the writing).

**28♦ "Application of PCR as a diagnostic tool of clinical mastitis in dairy cattle in comparison to traditional methods "**

**Authors:** M. E. Enany, H. M. Eid., Alaa. A. El-Kholy and Naglaa K. Abd ElAzeem

**Published:** *Suez Canal Vet. Med. J.*, Vol. XIII, No. (1), Oct. (2008), pp : 61- 68.



(It is a part of a M.Sc.V. Thesis that I was a Committee member and I supervised all of the research work).

**29♦ "Polymerase chain reaction for rapid diagnosis of a recent lumpy skin disease virus incursion to Egypt"**

**Authors:** Alaa. A. El-Kholy, H. M. T. Soliman and K. A. Abdelrahman

**Published:** *Arab J. Biotech.*, Vol. 11, No. (2), July (2008), pp : 293-302.

(I put the research idea & plane, did all sequencing and phylogenetic analyses shared all of the writing).

**30♦ "Characterization of recombinant baculovirus expressing envelop glycoprotein E of local BoHV-1"**

**Authors:** Eman R. Abdou, Alaa. A. El-Kholy and H. A. Hussein

**Published:** 11<sup>th</sup> Sci. Conf., Fac. Vet. Med., Cairo Univ., Hurgada, 15-18 May, 2011; *Vet. Med. J.*, Cairo Univ., Vol 59 (3), 2011, pp: 143-155.

(It is a part of a M.Sc.V. Thesis that I was a Committee member and I supervised all of the research work).

**31♦ "Locally prepared live and inactivated bovine Herpesvirus-1 gE negative vaccines induce immune response in calves and allow serological differentiation"**

**Authors:** El-Bagoury G., Doaa I. Amer, El-Nahas E. and Alaa. A. El-Kholy

**Published:** *Banha Vet. Med. J.*, Vol. 20, No. (2), Dec. (2009), pp : 79- 88.

(It is a part of a M.Sc.V. Thesis that I was a Committee member and I supervised all of the research work).

**32♦ "Baculovirus expression and diagnostic utility of the glycoprotein E of bovine herpesvirus-1.1 Egyptian strain "Abu-Hammad"**

**Authors:** Alaa. A. El-Kholy, Eman R. Abdou, Douaa I. Rady, Mai M. Elseafy

**Published:** *Journal of Virological Methods* 191 (2013), 33- 40.

**33♦ " Construction, Characterization and Immunogenicity of a Glycoprotein E Negative Bovine Herpesvirus-1.1 Egyptian Strain "Abu-Hammad "**

**Authors:** Alaa. A. El-Kholy, Doaa I. Rady, Eman R. Abdou, Mai M. Elseafy, Khalid A. Abdelrahman and Hatem Soliman

**Published:** *Journal of Virological Methods* 194 (2013), 74- 81.

**B- Researches in Publication:**

**1- "Loop-mediated Isothermal Amplification Reaction Using a Nondenatured genomic DNA for rapid detection of bovine herpesvirus-1"**

**Authors:** Alaa. A. El-Kholy, Khalid Adelrahman and Hatem M. T. Soliman

**2- "Differentiation among Capripoxviruses by Sequence Analysis and PCR-RFLP of P32 Gene"**

**Authors:** K. A. Adelrahman, H. M. T. Soliman and Alaa. A. El-Kholy

**Social Activities:                    A member in :**

♥ Egyptian Vet. Med. Association.

♥ Egyptian Society of immunology.

♥ Egyptian Society of Virology.

- ♥ Egyptian Society for Cattle Diseases.
- ♥ Egyptian Vet. Assoc. for Buffaloes Development.
- ♥ Egyptian Society of Poultry.
- ♥ Egyptian Vet. Med. Society for Pathology and Clinical Pathology.
  - ♥ American Society for Microbiology (ASM), USA.
  - ♥ American Cultural Center – Cairo.
  - ♥ A subscriber for Molecular and Cell Biology Journal and ASM news since Jan 1997.

**English Competency:**

\* Conversational English courses :

Group "4" grade **B+**; Fall **1991** (American Univ., Cairo, Egypt).

Group "5" grade **A**; Spring **1992** (American Univ., Cairo, Egypt).

\* International TOEFL score : **543** (March **1993**, AUC, Cairo, Egypt).

**References and Transcripts:** Available upon request.

**References:**

- 1- Prof. Dr **Seham A. El-Zeedy**, Director of VSVRI, ARC, P.O.Box # 131, Abbassia, **Cairo, Egypt**.
- 2- Prof. Dr **Adel O. Abdel Rahman** and Prof. Dr **Fekria El-Bordeni**; Former Directors of VSVRI.
- 3- Prof. Dr **Adel A. Fayed**, Infect. Dis. and Animal Med., Dept., Vet. Med. Fac., **Cairo Univ., Egypt**.
- 4- Prof. Dr. **Ahmed Sanosy**, former Vice Dean for Res. and Grad. studies, Vet. Med. Fac., **Cairo Univ., Egypt**
- 5- Dr. **Julia Ridpath**, National Animal Diseases Center, ARS, USDA, Ames, **Iowa 50010, USA**.
- 6- Dr. **Kenneth B. Platt**, MIPM Dept., Vet. Med. College, ISU, Ames, **Iowa 50011, USA**.
- 7- Dr. **Steven R. Bolin**, MI Dept., Michigan State University, **Michigan, USA**
- 8- Dr. **D-L Hank Harris**, Former Chair of MIPM Dept., Vet. Med. College, ISU, Ames, **Iowa 50011, USA**.
- 9- Dr. **Tilahun Yilma**, VM - PMI Dept., Vet. Med. School, UC-Davis, **California 95616, USA**.

" السيرة الذاتية " للدكتور / علاء عبد المنعم أحمد عبد العال الخولى

الإسم : علاء عبد المنعم أحمد عبد العال الخولى  
الجنسية : مصرى  
الديانة : مسلم  
الوظيفة الحالية : " رئيس بحوث " بوزارة الزراعة، مركز البحوث الزراعية،  
معهد بحوث الأمصال واللقاحات البيطرية - العباسية  
الحالة الإجتماعية : متزوج و لديه خمسة أبناء.  
العنوان : 9 ش. البطراوى - المنطقة الأولى - مدينة نصر- القاهرة  
التليفون المحمول : 012 3439505  
البريد الإلكتروني : [svri@idsc.gov.eg](mailto:svri@idsc.gov.eg) & [aaelfouly@yahoo.com](mailto:aaelfouly@yahoo.com)

أولاً : المؤهلات العلمية:

- (1) بكالوريوس العلوم الطبية البيطرية - مايو 1985 - كلية الطب البيطرى - جامعة القاهرة.
- (2) دبلوم أمراض حيوانات المزرعة - فبراير 1988 - كلية الطب البيطرى - جامعة القاهرة.

- (3) ماجستير العلوم الطبية البيطرية (أمراض معدية) -- يوليو 1991 -- كلية الطب البيطرى - جامعة القاهرة - وعنوان الرسالة: "بعض الدراسات عن مرض الحمى القلاعية فى مصر".
- (4) دكتوراه الفلسفة فى العلوم الطبية البيطرية (أمراض معدية) -- إبريل 1997 -- كلية الطب البيطرى - جامعة القاهرة - تم انجاز أعمال الرسالة بالكامل بالولايات المتحدة الأمريكية، جامعة ولاية أيوا، أمز - أيوا وعنوان الرسالة :

"دراسات جزيئية ومناعية عن الإصابة بالإسهال الفيروسي فى الماشية".

### ثانياً : المشاركة فى الإشراف على الرسائل العلمية:

#### أ - رسائل علمية (منتهية):

- 1- رسالة دكتوراه الفلسفة فى العلوم الطبية البيطرية (البكتريولوجيا - المناعة - الفطريات) فى موضوع " التحليل البكتريولوجى والسيروولوجى لعترات الايشيريشيا كولاي المسببة لمرض الإسهال فى العجول فى محافظة الاسماعيلية"
- بقسم الميكروبيولوجيا - كلية الطب البيطرى - جامعة قناة السويس - الاسماعيلية.
- تحت إشراف : أ.د/ محمد السيد عنانى و أ.د/ عادل فايق فريد و د/ علاء عبد المنعم الخولى.
- الطالبة : ط . ب / كوثر حسين أحمد الصباح (بالمعامل البيطرية بالاسماعيلية)
- تمت مناقشتها فى: 13-8-2003 .

- 2- رسالة دكتوراه الفلسفة فى العلوم الطبية البيطرية (أمراض معدية) فى موضوع " آفاق جديدة للسيطرة على مرض التهاب الأنف و القصبه الهوائية البقرى المعدى باستخدام الحامض النووى المشفر لجليكوبروتين د "
- بقسم طب الحيوان والأمراض المعدية - كلية الطب البيطرى -- جامعة القاهرة .
- تحت إشراف : أ.د/ عادل عبد العظيم فايد و أ.د/ منير عبد الحليم و د/ علاء عبد المنعم الخولى.
- الطالب : باحث مساعد / خالد عبد الرحمن ابو المعاطي (بشعبة البحوث البيطرية - قسم طب و طفلييات الحيوان - المركز القومى للبحوث).
- تمت مناقشتها فى: 3-8-2004 .

- 3- رسالة ماجستير فى العلوم الطبية البيطرية (البكتريولوجيا -- المناعة - الفطريات) فى موضوع : " دراسة على إستخدام إختبار البلمرة المتسلسل فى تشخيص مرض اليونزى فى الأبقار"
- بقسم الميكروبيولوجيا - كلية الطب البيطرى - جامعة القاهرة .
- تحت إشراف : أ.د/ رفيع توفيق محمد سليمان و د/ علاء عبد المنعم الخولى.
- الطالبة : ط . ب / هالة الصاوى أحمد الصاوى
- (بقسم بحوث اللقاحات البكتيرية اللاهوائية بالمعهد) -
- تمت مناقشتها فى: 4-8-2005 .

- 4- رسالة ماجستير فى العلوم الطبية البيطرية (البكتريولوجيا - المناعة - الفطريات) فى موضوع : "إستخدام تفاعل البلمرة المتسلسل كوسيلة تشخيص لالتهاب الضرع الإكلينيكي فى ماشية اللبن بالمقارنة بالطرق التقليدية"
- بقسم الميكروبيولوجيا - كلية الطب البيطرى - جامعة قناة السويس - الاسماعيلية.
- تحت إشراف : أ.د/ محمد السيد عنانى و أ.م/ حمزة محمد إبراهيم و د/ علاء عبد المنعم الخولى.
- الطالبة : ط . ب / نجلاء حمدى عبد العظيم محمد (بالاسماعيلية) -
- تمت مناقشتها فى: 14-3-2008 .

- 5- رسالة ماجستير العلوم البيطرية (فيروسى) فى موضوع : "تحضير و فحص مبدئى لللقاح المثبط و الحى لفيروس الهيريس البقرى-1 الخالى من الجليكوبروتين إيه "
- بقسم الفيروسى - كلية الطب البيطرى بمشهر - جامعة بنها .
- تحت إشراف أ.د/ جبر فكري الباجورى و أ.د/ علاء عبد المنعم الخولى و د/ إيهاب مصطفى النحاس .
- الطالبة : ط . ب / دعاء إبراهيم عامر (بالمعهد) .
- تمت مناقشتها فى: 23-8-2010 .

- 6- رسالة ماجستير العلوم البيطرية (فيروسى) فى موضوع :

"التوصيف الأنتيجيني و الجزيني للجليكوبروتين إيه لفيروس الهيريس البقرى-1 المحلى المدمج وراثياً في فيروس الباكيلو ليستخدم كأداة تشخيصية" - بقسم الفيروسولوجى - كلية الطب - البيطرى - جامعة القاهرة .  
تحت إشراف أ.د/حسين على حسين أحمد و أ.م/ أسامة عبد الرؤوف و أ.د/ علاء عبد المنعم الخولى .  
الطالبة : ط . ب / إيمان رضا محمد (بالمعهد). تمت مناقشتها فى: 30-9-2010.

#### ب - رسائل علمية (تحت الدراسة):

1- رسالة ماجستير الهندسة الوراثية و التكنولوجيا الحيوية (التشخيص الجزيني لأمراض الحيوان) فى موضوع: "استخدام اختبار تفاعل انزيم البلمرة المتسلسل فى الكشف الجزئى عن فيروس الهيريس البقرى-1 بقسم التشخيص الجزينى للأمراض الحيوانية - معهد الهندسة الوراثية و التكنولوجيا الحيوية جامعة المنوفية- مدينة السادات.  
تحت إشراف أ.د / جمال سليمان رضوان و د/ علاء عبد المنعم الخولى .  
الطالبة : مي محمد عبد الرحمن محمد (بالمعهد).

2- رسالة دكتوراه الفلسفة فى العلوم الطبية البيطرية (فيروسولوجى) فى موضوع : "كلونة و التعبير عن جينات يروتينات السطح الخارجى لفيروس الهيريس البقرى نوع (1)".  
بقسم الفيروسولوجى - كلية الطب - البيطرى - جامعة القاهرة .  
تحت إشراف أ.د/حسين على حسين أحمد و أ.د/ علاء عبد المنعم الخولى .  
الطالبة : ط . ب / إيمان رضا محمد (بالمعهد).

#### ثالثاً : الإشتراك فى المؤتمرات العلمية:

- 1- المؤتمر العلمى الثانى لكلية الطب البيطرى - جامعة القاهرة - الجيزة فى مارس 1992 ( إلقاء بحث).
- 2- المؤتمر الواحد والعشرون للطب البيطرى العربى - القاهرة فى أبريل 1993 ( إلقاء بحث).
- 3- المؤتمر العالمى للعلوم - جامعة كاليفورنيا - ديفيز - بولاية كاليفورنيا بالولايات المتحدة الأمريكية ف نوفمبر 1993 (مشارك).
- 4- مؤتمر العاملين الباحثين فى أمراض الحيوان "CRWAD" - شيكاغو - ولاية إلينوى بالولايات المتحدة الأمريكية فى نوفمبر 1994 (مشارك).
- 5- المؤتمر الرابع والعشرون للطب البيطرى العربى - القاهرة فى مايو 1999 (مشارك).
- 6- المؤتمر العلمى الأول لكلية طب بيطرى بنى سويف، جامعة القاهرة، الفيوم، فى سبتمبر 1999 (لقاء بحث).
- 7- المؤتمر العلمى الثالث للأبحاث الطبية البيطرية - كلية الطب البيطرى - جامعة الإسكندرية - الإسكندرية فى أكتوبر 1999 (إلقاء بحث).
- 8- المؤتمر العلمى الخامس للجمعية المصرية لأمراض الماشية، جامعة أسيوط، أسيوط فى نوفمبر 1999 (إلقاء بحث).
- 9- المؤتمر العلمى السادس لكلية الطب البيطرى - جامعة القاهرة - القاهرة فى مارس 2000 (مشارك).
- 10- المؤتمر العالمى الخامس للجمعية الأوروبية للفيروسولوجيا البيطرية (ESVV) - مدينة بريشيا - إيطاليا فى أغسطس 2000 (مشارك).
- 11- المؤتمر الخامس والعشرون للطب البيطرى العربى - القاهرة فى مايو 2001 (إلقاء بحث).
- 12- المؤتمر الدولى الأول لشعبة بحوث الهندسة الوراثية و البيوتكنولوجيا، بالمركز القومى للبحوث - الجيزة - مصر ، 15- 17 مارس 2004 (مشارك).
- 13- المؤتمر العلمى السابع لكلية الطب البيطرى، جامعة الزقازيق، بشرم الشيخ ، 21- 23 يوليو 2004 (إلقاء بحث).
- 14- المؤتمر العلمى الأول للفيروسولوجيا - جمعية الفيروسولوجيا المصرية، المركز العربى للدراسات العليا و البحث العلمى، جامعة القاهرة - الجيزة، 7- 8 ديسمبر - سنة 2004 (إلقاء بحث).

- 15- المؤتمر العلمى الرابع (الدولى) كلية الطب البيطرى، جامعة المنصورة - المنصورة، 5- 6 أبريل- سنة 2005 (الإشتراك ببحث).
- 16- المؤتمر العلمى الرابع، كلية الطب البيطرى - بنى سويف ، 24-27 سبتمبر، بالزغفرانة، سنة 2005 (الإشتراك ببحث).
- 17- المؤتمر العلمى السابع للدواجن - الجمعية المصرية للدواجن، 6- 9 مارس سنة 2006، بشرم الشيخ (مشترك).
- 18- المؤتمر العلمى السنوى الحادى عشر للمناعة - الجمعية المصرية للمناعة، 29 نوفمبر- 1 ديسمبر سنة 2006، بشرم الشيخ (مشترك).
- 19- المؤتمر العلمى التاسع (الدولى الأول)، كلية الطب البيطرى - جامعة القاهرة، 24- 27 أبريل سنة 2007، بشرم الشيخ (الإشتراك ببحث).
- 20- المؤتمر الدولى الرابع لشعبة البحوث البيطرية، بالمركز القومى للبحوث - الجيزة - مصر ، 26- 28 فبراير 2008 (مشترك).
- 21- المؤتمر العلمى السادس لكلية طب بيطرى بنى سويف، جامعة القاهرة، العين السخنة، إبريل 2010.
- 22- المؤتمر العلمى الحادى عشر، كلية الطب البيطرى - جامعة القاهرة، الغردقة، مايو 2011م (الإشتراك ببحث).

### رابعاً : الجمعيات والهيئات العلمية المشتركة فيها:

- 1- نقابة الأطباء البيطريين (القاهرة).
- 2- الجمعية الطبية البيطرية المصرية.
- 3- الجمعية المصرية لأمراض الماشية.
- 4- الجمعية الطبية البيطرية المصرية لتنمية الجاموس.
- 5- الجمعية الطبية البيطرية المصرية للباثولوجيا والباثولوجيا الإكلينيكية.
- 6- الجمعية الأمريكية للميكروبيولوجى (ASM).
- 7- جمعية المناعة المصرية.
- 8- الجمعية المصرية للدواجن.
- 9- مجلة البيولوجيا الجزيئية والخلوية.
- 10- الجمعية الأمريكية للتقدم العلمى (AAAS).
- 11- المركز الثقافى الأمريكى.

### خامساً: نشاطات علمية وإرشادية أخرى :

- (1) الحصول على جائزة الدولة التشجيعية فى العلوم البيولوجية لعام 2002 من اكااديمية البحث العلمى و التكنولوجيا المصرية فى يونيو 2003.
- (2) المشاركة الدائمة فى تدريس التقنيات الحديثة للهندسة الوراثية للأطباء الجدد والزملاء بأقسام المعهد المختلفة ومن الخارج من خلال الدورات التدريبية والندوات العلمية التى ينظمها المعهد دورياً. المشاركة الفعالة فى محاولات تطوير إنتاج اللقاحات والانتيجينات بالمعهد وذلك بإستخدام أحدث تقنيات الهندسة الوراثية الهادفة لمكافحة أمراض الحيوان.
- (3) توجيه وتدريب الزملاء داخل وخارج المعهد ومساعدتهم لإتمام الرسائل العلمية فى مجال التقنيات الحديثة للبيولوجيا الجزيئية للعديد من الفيروسات و البكتيريا الخطيرة.
- (4) المشاركة كمحاضر فى بعض ورش العمل والدورات التدريبية التى تعقد داخل و خارج المعهد لشرح أحدث تقنيات وتطبيقات البيولوجيا الجزيئية لتشخيص الأمراض الفيروسية والبكتيرية وإستخدام الهندسة الوراثية لإستنباط مواد مشخصة ولقاحات مدمجة وراثياً لمثل هذه الأمراض.
- (5) المشاركة بدور رئيسى فى إعداد وإنجاز بعض المشاريع البحثية بالمعهد فى إطار التفاعل العلمى الفورى لمواجهة مشاكل الحقل الهامة منذ 1998، و حالياً :

(6) (أ) رئيس المشروع البحثي في مجال الهندسة الوراثية والممول من اكااديمية البحث العلمي تحت عنوان " تصميم وإنتاج لقاحات تمييزية في مصر " اللقاح المركب لفيروس الهيريس البقرى - I الخالى من الجليكوبروتين إيه مع المركب التشخيصى المرافق للسيطرة على مرض الألتهاب الأنفى والقصبى البقرى - الإلتهاب المهبلى التقيحى المعدى " .

(ب) الرئيس المساعد للمشروع البحثي في مجال الهندسة الوراثية والممول من اكااديمية البحث العلمي تحت عنوان " تصميم وإنتاج مواد تشخيصية من بروتينات لا بنائية مركبة وراثية للسيطرة على مرض الحمى القلاعية فى مصر " .

(7) المشاركة بدور رئيسى فى تحديد نوع الفيروس المسبب لوباء الحمى القلاعية فى مصر عام 2006 باستخدام أحدث تقنيات وتطبيقات البيولوجيا الجزيئية مما أدى إلى إستنباط لقاح محلى جديد ثنائى للحمى القلاعية (النوعين O<sub>1</sub> and A) لأول مرة فى مصر، والذي أوقف الخسائر الإقتصادية الفادحة بين قطعان الماشية و المشاركة بنفس الخبرة و العمل فى وباء 2012 مما أدى إلى إستنباط لقاح محلى جديد ث للحمى القلاعية الثلاثى (النوعين O<sub>1</sub> , A and SAT2) لأول مرة فى مصر، والذي أوقف الخسائر الإقتصادية الفادحة بين قطعان الماشية.

(8) المشاركة بدور رئيسى فى التشخيص المعملى السريع لوباء الجلد العقدي فى مصر عام 2006 باستخدام أحدث تقنيات وتطبيقات البيولوجيا الجزيئية مما أدى إلى سرعة و دقة مواجهة الوباء و الحد من الخسائر الإقتصادية الناتجة عنه.

(9) عضو اللجنة العلمية لتقييم اللقاح المثبط (نيمو - 5) الذى يحتوى على النوعين الوراثيين لفيروس الاسهال الفيروسي البقرى و التهاب القصبية الهوائية البقرى المعدى و البارافلوروزا-3 و السينسيتيا التنفسى من : 15 / 3 / 2004 الى 3 / 7 / 2004.

(10) عضو لجنة إعداد الملفات العلمية لتسجيل مستحضرات الوحدة الإقتصادية بالمعهد خارج جمهورية مصر العربية.

(11) عضو اللجنة الإستشارية لإعداد مشروع للتعاون الدولى الأفريقي فى اطار اتفاقية النيباد للمشاريع الممولة بنكيا تحت عنوان :

NEPAD- "New approach for control of serious viral diseases affecting ruminants in Africa" CAADP BANKABLE PROJECT.

(12) عضو و رئيس فى لجان البت و المواصفات و الإحتياجات و الفحص للعديد من المناقصات العامة و المحدودة لتوريد و شراء الأجهزة العلمية و الكيماويات و المستلزمات المعملية للمعهد .

(13) عالم زائر (متدرب) بالمعمل الدولى للبيولوجيا الجزيئية لمسببات الأمراض الإستوائية بقسم الباثولوجى و الميكروبيولوجى و المناعة بكلية الطب البيطرى - جامعة كاليفورنيا - ديفيز بولاية كاليفورنيا - الولايات المتحدة الأمريكية من مايو 1993 إلى مارس 1994. تم خلالها التدريب على و المساهمة فى إستنباط اللقاحات و المواد المشخصة السريعة المهندسة وراثيا لفيروس طاعون المجترات الصغيرة (PPRV) وكذلك المشاركة فى ورش العمل التالية بجامعة كاليفورنيا - ديفيز :

أ- ورشة عمل عن "الإرشادات الصحية و الأمنية للمواد المشعة" - يونيو 1993.

ب- ورشة عمل عن "مقدمة للتعامل مع الحامض النووى الديوكسى ريبوزى" - سبتمبر 1993.

ت- ورشة عمل عن "تقنيات تفاعل البلمرة التسلسلى PCR" - ديسمبر 1993.

(14) طالب دكتوراه "Type I" بجامعة ولاية أيوا - أمز - ولاية أيوا - الولايات المتحدة الأمريكية (يوليو 1994 - ديسمبر 1996). تم من خلالها إستكمال البحث العلمى و العملى الخاص برسالة الدكتوراه تحت عنوان "دراسات جزيئية و مناعية عن الإصابة بالإسهال الفيروسي فى الماشية".

(15) المشاركة فى تدريس فصول دراسية (فيولوجى) لطلبة الدراسات العليا - بالتخصص فى شرح عزل الأحماض النووية الريبوزية و الديوكسى ريبوزية و تكوين خرائط جينية (Gene Mapping) للفيروسات و تقنية تفاعل البلمرة المتسلسل (PCR) و تحليل التتابع النيوكلوتيدي للأحماض النووية (Sequencing) و إستخدام فيروس الباكيلو لإنتاج البروتينات الفيروسية المدمجة وراثيا (Recombinant viral proteins) و إستخدامها فى التشخيص، بجامعة ولاية أيوا - إمز - ولاية أيوا - الولايات المتحدة الأمريكية (1995 - 1996).

16 المشاركة بصفة غير رسمية في البرنامج التدريبي للمستحضرات الحيويه البيطرية بمعهد التعاون الدولي في بيولوجيا الحيوان (IICAB) – جامعة ولاية أيووا – إمز – الولايات المتحدة الأمريكية (مايو- يونيو 1996).

**سادساً : البحوث المنشورة :**

1♦ "Immune response to foot and mouth disease (FMD) and BCG vaccination in calves challenged with FMD virus".

**Authors:** Arab R., Abou-Zeid A., Omar A., Soufy H., El-Nakashly S. and Alaa. A. El-Kholy

**Published:** Proc. 2<sup>nd</sup> Sci. Cong. Vet. Med. Fac., Cairo Univ., 2-4, March 1992, pp: 105-111.

(I have done all of the work as its part of my Master thesis).

2♦ "Clinical studies on the effect of BCG in protecting calves challenged with FMD virus".

**Authors:** Arab R., Abou-Zeid A., Omar A., Soufy H. and Alaa. A. El-Kholy

**Published:** Beni-Suef Vet. Med. J., Vol. 2, No. 1, pp: 92-104, 1992.

(I have done all of the work as its part of my Master thesis).

3♦ "Effect of FMD and BCG vaccines on the blood picture of calves challenged with FMD Virus".

Egypt. **Authors:** Arab R., Abou-Zaid A., Omar A., Soufy H. and Alaa. A. El-Kholy

**Published:** J. Path. and Comparat. Pathology, Vol. 1, No. 1, pp: 11-24, 1992.

(I have done all of the work as its part of my Master thesis).

4♦ "Trial for enhancement of protection against Sunffles in Rabbits with BCG".

**Authors:** Gergis S., Aboul Saoud S., Dimitri R., Afaf Monazia, El-Belkamy F., Alaa. A. El-Kholy and Abdel Aziz M.

**Published:** Proc. 21<sup>st</sup> Arab Vet. Med. Cong., April 11-15, 1993 & J. Egypt. Vet. Med. Assoc. 53, No.1 & 2, pp: 221-226, 1993.

(I prepared the BCG used and also shared in other immunoassays).

5♦ "Cloning and expression of the nucleoprotein of Peste des Petits Ruminants virus in Baculovirus for use in serological diagnosis".

**Authors:** Ismail T., Yamanaka M., Saliki J., Alaa. A. El-Kholy, Mebus C. and Yilma T.

**Published:** *Virology*, 208, 776-778, 1995.

(I have done sequence analysis of the PPRV N gene and confirmed its cloning and expression in baculovirus).

6♦ "Use of polymerase chain reaction to simultaneously detect and type bovine viral diarrhea viruses isolated from clinical specimens".

**Authors:** Alaa. A. El-Kholy, Bolin S., Ridpath J., Arab R., Abou zeid A., Hammam H. and Platt K.

**Published:** *Rev. Sci. & Tech. Off. Int. Epiz.*, Vol.17 (3), Dec., 1998.

(I did all the work as its part of my Ph.D).

7♦ "Biomolecular studies on caprine local isolates of *Pasteurella haemolytica*".

**Authors :** Eman El-Rawy, Seham El-Zeidy, Alaa. A. El-Kholy and Amina El- Bayomi .

**Published:** J. Egypt. Vet. Med. Assoc., Vol. 58, No. 3, Dec., 1998.

(I put the research idea & plane, did all protein profiles & western blots and shared writing).

8♦ " Evaluation of protective immunity induced by a recombinant baculovirus expressing two structural proteins of bovine viral diarrhea virus in calves".

**Authors:** Alaa. A. El-Kholy, Ghaly H. and Daoud A.

**Published:** *Egypt. J. Immunol.*, Vol. 6 (1), 1999, pp: 163-171.

(I put the research idea & plane, prepared recombinant vaccine, did the clinical & lab studies and all writing).



**9♦ "Molecular and immunological characterization of cross reactive antigens of some *Salmonella* serovars".**

**Authors:** Alaa. A. El-Kholy, Nahed Khamis, Amina El-bayomy and Hussein A.

**Published:** J. Egypt. Vet. Med. Assoc., Vol. 59, No. 2 & 3, 1999, pp: 395-417. Proc. 24<sup>th</sup> Arab Vet. Med. Cong., Cairo, Egypt. (I put the research idea & plane, did all protien profiles & western blots & ELISAs and shared all writing).

**10♦ "Baculovirus expression of p14 and gp48 of the NADL strain of bovine viral diarrhea virus and utility for serodiagnosis".**

**Authors:** Alaa. A. El-Kholy, Bolin S., Ridpath J., Arab R., Abou-Zeid A., Hammam H. and Platt K.

**Published:** Beni-Suef Vet. Med. J. Vol. 9, No. 3-B (1999), pp: 491-511. Proc. 1<sup>st</sup> Sci. Cong. of Beni-Suef Vet. Med. Fac., Al-Fayoum, Egypt. (I did all work as it's a part of my Ph.D thesis).

**11♦ "Simultaneous infection with rabbit haemorrhagic disease virus and rabbit pasteurellosis in rabbit farms in Egypt".**

**Authors:** Ibrahim I., Abass A., Alaa. A. El-Kholy, Safia Kandil and Hussein A.

**Published:** Alexand. J. Vet. Sci., Vol. 15, No. 3, pp: 567-578, 1999. Proc. 3<sup>rd</sup> Conf. Vet. Med. Res., Alex. Univ. Alexandria, Egypt. (I did viral and bacterial protein profiles and shared writing).

**12♦ "Comparative polymerase chain reaction assays for detection and genotyping of bovine viral diarrhea viruses in Egypt".**

**Author:** Alaa. A. El-Kholy

**Published:** Proc. of the 5<sup>th</sup> Sci. Cong., Egypt. Soc. For Cattle Diseases, 28-30 Nov., 1999, Assiut, Egypt, pp: 164-170. (I have done it all).

**13♦ "Evaluation of a recombinant ELISA antigen for serodignosis of bovine viral diarrhea virus in infected and immune cattle sera in Egypt".**

**Authors :** Alaa. A. El-Kholy, Ghaly H., El-Sabbagh M. and Samira El-Said

**Published:** Vet. Med. J., Giza Vol. 48, No. 2 (2000): 227 - 238.

(I put the research idea & plane, did it all except for animal vaccinations and virus challenge exposure).

**14♦ "Use of PCR and *In situ* DNA hybridization for detection of *Aeromonas hydrophila* infection in Nile Tilapia (*Oreochromis niloticus*)".**

**Autors:** EL-sayed E, Alaa. A. El-Kholy, Hashad M. and Abdel Haleem M.

**Published:** J. Egypt. Vet. Med. Ass., 61, No 3 : 177-189 & 25<sup>th</sup> Arab Vet. Med. Congress, Cairo, Egypt, May (2001). (I shared equally in all lab procedure and writing).

**15♦ " Molecular characterization of *Mannheimia haemolytica* extracts and utility in serodiagnosis of pasteurellosis in Egypt".**

**Authors:** Alaa. A. El-Kholy, Eman M. El-Rawy , Manal S. M. and Hussein A. Z.

**Published:** J. Egypt. Vet. Med. Ass., Vol. 64, No. 3, May (2004) : 321-343.

(I put the research idea & plane, did all antigens preparations, bacterial protein profiles, western blots, shared equally in immunoassays and almost all writing).

**16♦ "Molecular evaluation of some antigenic extracts of *Corynebacterium pseudotuberculosis* and utility in serodiagnosis"**

**Authors:** Alaa. A. El-Kholy, Aml M. El-Sawah and Elham A.El-Ebiary

**Published:** Proc. 7<sup>th</sup> Sci. Conf. Fac.Vet. Med., Zagaziq Univ. 15-17 June (2004), Sharm El-Sheikh, Egypt, pp : 177-189.

(I put the research idea & plane, did all antigens preparations, bacterial protein profiles, western blots, shared equally in immunoassays and did all of the writing).

**17♦ "An approach for improvement of the fowl cholera adjuvanted vaccine in Egypt "**

**Authors:** Nahed I.M.M. Khamis; Alaa. A. El-Kholy and Ahmed M. Daoud

**Published:** Vet. Med. J., Giza, Vol. 52, No. 4, October (2004) : 561-573.

(I put the research idea & plane, did all preparations of Lysate vaccine, bacterial protein profiles, shared equally in other vaccine formulations, immunoassays and did almost all of the writing).

**18♦ "Phylogenetic characterization of some bovine viral diarrhea viruses in Egypt"**

**Authors:** Alaa. A. El-Kholy, Vilcek S. and Daoud A.

**Published:** 1<sup>st</sup>. Confer. Virol., Egypt. Soc. Virol., Cairo Univ., Giza, Dec. 7-8. (2004) Egypt & Egypt. J. Virol., Vol. 1 (1), 2004 : 421-435.

(I put the research idea & plane, did all clinical specimens preparations, immunoassays, RNA extractions, RT-PCRs, computer-based sequence alignments and phylogenetic analyses and did all the writing).

**19♦ "Trials for preparation of combined inactivated respiratory virus vaccine containing BVD genotypes I & II, IBR, PI-3 and BRS viruses "**

**Authors:** Zeidan S. M., Samira S. T., El-Sabbagh M. M., Ghaly H. M., Abd El-Sameea A.\*, Iman K. A., and Alaa. A. El-Kholy

**Published:** 4<sup>th</sup> International. Sci. Conf., Mansoura Univ. & Teramo Univ. (Italy), Mansoura, Egypt, April 5-6, 2005: 433-445.

(I shared equally in all lab & animal procedure for vaccine preparation and evaluation and did all the writing).

**20♦ "Preparation of diagnostic Lysate antigens for rapid evaluation of the local Entero-3 vaccine"**

**Author:** Alaa. A. El-Kholy, Aml M. El-Sawah , Zeidan S. M., Wasel M. S. and Daoud A.

**Published:** 4<sup>th</sup> Sci. Conf., Beni-Suef Univ., Fac. Vet. Med., 24-27<sup>th</sup> Sept., 2005. & Beni-Suef Vet. Med. J., Vol. 15 No. 2, 2005 : 184-189.

(I put the research idea & plane, prepared all antigens, shared equally in lab assays and did all of the writing).

**21♦ "Molecular and immunological detection of BHV-1 in clinical specimens".**

**Author:** Alaa. A. El-Kholy

**Published:** *Egypt. J. Immunol.*, Vol. 12 (2), 2005, pp: 125-136.

(I have done it all).

**22♦ "Laser-Raman spectroscopy: A novel approach for sensitive molecular characterization of mycobacterium genomic DNAs"**

**Author:** Mona Abdel Aziz and Alaa. A. El-Kholy

**Published:** *Arab J. Biotech.*, Vol. 9, No. (3), October 2006, pp : 453-466.

(I put the research idea & plane, did all mycobacterium DNA procedure and, shared in the writing).

**23♦ "Genetic characterization of the Egyptian vaccinal strain Abu-Hammad of BHV-1"**

**Authors:** Alaa. A. El-Kholy and K. A. Abdelrahman

**Published:** *Rev. Sci. Tech. Off. Int. Epiz.*, Vol. 25 (3), Dec., 2006, pp: 1081-1095. (Research idea & plane, did all sequencing and phylogenetic analyses, shared equally in all lab procedure and did all of the writing).

**24♦ "Genetic identification of the foot-and-mouth disease virus caused 2006 outbreak in Egypt"**

**Author:** Alaa. A. El-Kholy, Hatem M. T. Soliman , Noha A. Helmy and Adel O. Abdel Rahman

**Published:** *Arab J. Biotech.*, Vol. 10. No. (1), January (2007), pp : 193-206.

(I put the research idea & plane, did all sequencing and phylogenetic analyses, shared all RT-PCRs and all of the writing).

**25♦ " Preparation and preliminary evaluation of a lysate *E. coli* vaccine in poultry".**

**Author:** Noha A. Helmy, Alaa. A. El-Kholy, Aml M. El-Sawah, Abu Elsoud S. and Adel O. Abdel Rahman

**Published:** 9<sup>th</sup> Sci. 1<sup>st</sup> Internat. Conf., Fac. Vet. Med., Cairo Univ., Sharm El-Sheikh, 24-27<sup>th</sup> April, 2007.

(I put the research idea & plane, did all preparations of Lysate vaccine and shared equally in other experiments)

**26♦ " Molecular typing of a new foot-and-mouth disease virus in Egypt "**

**Author:** Alaa. A. El-Kholy, Hatem M. T. Soliman and Adel O. Abdel Rahman

**Published:** *Veterinary Record*, (2007) 160, 695-697.

(I put the research idea & plane, did all sequencing and phylogenetic analyses, shared all of the writing).

**27♦ "Recent Introduction of Foot-and-Mouth Disease Virus Serotype A into Egypt"**

**Author:** N. J. Knowles,<sup>\*</sup> J. Wadsworth,<sup>\*</sup> S. M. Reid,<sup>\*</sup> K. G. Swabey,<sup>\*</sup> Alaa. A. El-Kholy,<sup>†</sup> A. O. Abd El-Rahman,<sup>†</sup> H. M. Soliman,<sup>†</sup> K. Ebert,<sup>†</sup> N. P. Ferris,<sup>†</sup> G. H. Hutchings,<sup>\*</sup> B. Statham,<sup>\*</sup> D. P. King<sup>\*</sup> and D. J. Paton<sup>\*</sup>

**Published:** *J. Emerging Infect. Dis*, Vol. 13, No. 10, October 2007 pp: (1593-1596).

(I shared a main role in all sequencing and phylogenetic analyses of local isolates and shared in the writing).

**28♦ "Application of PCR as a diagnostic tool of clinical mastitis in dairy cattle in comparison to traditional methods "**

**Authors:** M. E. Enany, H. M. Eid,, Alaa. A. El-Kholy and Naglaa K. Abd ElAzeem

**Published:** *Suez Canal Vet. Med. J.*, Vol. XIII, No. (1), Oct. (2008), pp : 61- 68.

(It is a part of a M.Sc.V. Thesis that I was a Committee member and I supervised all of the research work).

**29♦ "Polymerase chain reaction for rapid diagnosis of a recent lumpy skin disease virus incursion to Egypt"**

**Authors:** Alaa. A. El-Kholy, H. M. T. Soliman and K. A. Abdelrahman

**Published:** *Arab J. Biotech.*, Vol. 11, No. (2), July (2008), pp : 293-302.

(I put the research idea & plane, did all sequencing and phylogenetic analyses shared all of the writing).

**30♦ Characterization of recombinant baculovirus expressing envelop glycoprotein E of local BoHV-1**

**Authors:** Eman R. Abdou, Alaa. A. El-Kholy and H. A. Hussein

**Published:** 11<sup>th</sup> Sci. Conf., Fac. Vet. Med., Cairo Univ., Hurgada, 15-18 May, 2011; *Vet. Med. J.*, Cairo Univ., Vol 59 (3), 2011, pp: 143-155.

(It is a part of a M.Sc.V. Thesis that I was a Committee member and I supervised all of the research work).

**31♦ "Locally prepared live and inactivated bovine Herpesvirus-1 gE negative vaccines induce immune response in calves and allow serological differentiation"**

**Authors:** El-Bagoury G., Doaa I. Amer, El-Nahas E. and Alaa. A. El-Kholy

**Published:** *Banha Vet. Med. J.*, Vol. 20, No. (2), Dec. (2009), pp : 79- 88.

(It is a part of a M.Sc.V. Thesis that I was a Committee member and I supervised all of the research work).

**سادساً : البحوث تحت النشر :**

**1- "Loop-mediated Isothermal Amplification Reaction Using a Nondenatured genomic DNA for rapid detection of BoHV-1"**

**Authors:** Alaa. A. El-Kholy, Khalid Adelrahman and Hatem M. T. Soliman

**2- "Differentiation among Capripoxviruses by Sequence Analysis and PCR-RFLP of P32 Gene"**

**Authors:** K. A. Adelrahman, H. M. T. Soliman and Alaa. A. El-Kholy

**سابعاً : المعرفة باللغات الأجنبية :**

- (1) دراسة اللغة الإنجليزية بالجامعة الأمريكية بالقاهرة :
- أ- دورة محادثة "المجموعة الرابعة" في خريف 1991م بتقدير " B<sup>+</sup> " .
- ب- دورة محادثة "المجموعة الخامسة" في ربيع 1992م بتقدير " A " .
- ج- دورة أكاديمية متقدمة و اختبار محلي "Institutional TOEFL" للغة الإنجليزية كلغة أجنبية بدرجة "526" (1992م).
- د- الاختبار الدولي "International TOEFL" للغة الإنجليزية كلغة أجنبية بدرجة "543" (مارس م1993).
- (2) شهادة دراسة اللغة الألمانية بمعهد جوته بالقاهرة "المستوى الدراسى الأول" (1992م).

**26♦ "Molecular typing of a new foot-and-mouth disease virus in Egypt "**

**Author:** Alaa. A. El-Kholy, Hatem M. T. Soliman and Adel O. Abdel Rahman

**Published:** *Veterinary Record*, (2007) 160, 695-697.

(I put the research idea & plane, did all sequencing and phylogenetic analyses, shared all of the writing).

**27♦ "Recent Introduction of Foot-and-Mouth Disease Virus Serotype A into Egypt"**

**Author:** N. J. Knowles,<sup>\*</sup> J. Wadsworth,<sup>\*</sup> S. M. Reid,<sup>\*</sup> K. G. Swabey,<sup>\*</sup> Alaa. A. El-Kholy,<sup>†</sup> A. O. Abd El-Rahman,<sup>†</sup> H. M. Soliman,<sup>†</sup> K. Ebert,<sup>\*</sup> N. P. Ferris,<sup>\*</sup> G. H. Hutchings,<sup>\*</sup> B. Statham,<sup>\*</sup> D. P. King<sup>\*</sup> and D. J. Paton<sup>\*</sup>

**Published:** *J. Emerging Infect. Dis.*, Vol. 13, No. 10, October 2007 pp: (1593-1596).

(I shared a main role in all sequencing and phylogenetic analyses of local isolates and shared in the writing).

**28♦ "Application of PCR as a diagnostic tool of clinical mastitis in dairy cattle in comparison to traditional methods "**

**Authors:** M. E. Enany, H. M. Eid,, Alaa. A. El-Kholy and Naglaa K. Abd ElAzeem

**Published:** *Suez Canal Vet. Med. J.*, Vol. XIII, No. (1), Oct. (2008), pp : 61- 68.

(It is a part of a M.Sc.V. Thesis that I was a Committee member and I supervised all of the research work).

**29♦ "Polymerase chain reaction for rapid diagnosis of a recent lumpy skin disease virus incursion to Egypt"**

**Authors:** Alaa. A. El-Kholy, H. M. T. Soliman and K. A. Abdelrahman

**Published:** *Arab J. Biotech.*, Vol. 11, No. (2), July (2008), pp : 293-302.

(I put the research idea & plane, did all sequencing and phylogenetic analyses shared all of the writing).

**30♦ "Characterization of recombinant baculovirus expressing envelop glycoprotein E of local BoHV-1"**

**Authors:** Eman R. Abdou, Alaa. A. El-Kholy and H. A. Hussein

**Published:** 11<sup>th</sup> Sci. Conf., Fac. Vet. Med., Cairo Univ., Hurgada, 15-18 May, 2011; *Vet. Med. J.*, Cairo Univ., Vol 59 (3), 2011, pp: 143-155.

(It is a part of a M.Sc.V. Thesis that I was a Committee member and I supervised all of the research work).

**31♦ "Locally prepared live and inactivated bovine Herpesvirus-1 gE negative vaccines induce immune response in calves and allow serological differentiation"**

**Authors:** El-Bagoury G., Doaa I. Amer, El-Nahas E. and Alaa. A. El-Kholy

**Published:** *Banha Vet. Med. J.*, Vol. 20, No. (2), Dec. (2009), pp : 79- 88.

(It is a part of a M.Sc.V. Thesis that I was a Committee member and I supervised all of the research work).

**32♦ "Baculovirus expression and diagnostic utility of the glycoprotein E of bovine herpesvirus-1.1 Egyptian strain "Abu-Hammad"**

**Authors:** Alaa. A. El-Kholy, Eman R. Abdou, Douaa I. Rady, Mai M. Elseafy

**Published:** *Journal of Virological Methods* 191 (2013), 33 – 40.

**33♦ " Construction, Characterization and Immunogenicity of a Glycoprotein E Negative Bovine Herpesvirus-1.1 Egyptian Strain "Abu-Hammad "**

**Authors:** Alaa. A. El-Kholy, Doaa I. Rady, Eman R. Abdou, Mai M. Elseafy, Khalid A. Abdelrahman and Hatem Soliman

**Published:** *Journal of Virological Methods* 194 (2013), 74 – 81.

**B- Researches in Publication:**

**1- "Loop-mediated Isothermal Amplification Reaction Using a Nondenatured genomic DNA for rapid detection of bovine herpesvirus-1"**

**Authors:** Alaa. A. El-Kholy, Khalid Adelrahman and Hatem M. T. Soliman

*Curriculum Vitae*

**ALAA A. EL-Kholy**



**Full Name:** Alaa Abdel-Moneim Ahmed Abdel Aal EL-Kholy

**Nationality:** Egyptian

**Religion:** Muslim

**Date & Place of birth:** 9 / 9 / 1962 Cairo – Egypt

**Social Status:** Married and have five kids, active, cooperative, self-motivated and well educated.

**Mailing Address:** Veterinary Serum & Vaccine Researches Institute, ARC,  
P.O. Box: 131, P.C. 11381, Abbassia, Cairo, Egypt.  
**Tel:** (2) 02-23421866 (2) 02-23421009 **Fax:** (2) 02-23428321  
**Mobile:** (2) 012-23439505 **E-Mail:** [svri@idsc.gov.eg](mailto:svri@idsc.gov.eg) & [aaelfouly@yahoo.com](mailto:aaelfouly@yahoo.com)

**Permenent Address:** Nasr City, first region, 9<sup>th</sup> El-Batrawy St., Cairo, Egypt.

**Education:** - **B. V. Sc.;** May, 1985, Cairo University, Egypt.

- **Diploma of "Livestock Diseases";** Feb., 1989, Cairo University, Egypt.

- **M. V. Sc. (Infectious Diseases);** July, 1991, Cairo University, Egypt.

**Thesis:** “ **Some Studies on Foot and Mouth Disease in Calves in Egypt** ”

- **Ph. D (Infectious Diseases);** April, 1997, Cairo University, Egypt.

Doctoral research was conducted at **Iowa State University (ISU)**, Ames, Iowa, USA  
(from July, 1994 to December, 1996).

**Thesis:** “ **Molecular and Immunological studies on Bovine Viral Diarrhea Virus Infections in Cattle**”.

- Completed a course of "**Health and Safety Instructions for Radioactive Isotopes**"; University of California UC- Davis, California, USA, June, 1993.
- Completed a course of "**Introduction to DNA Manipulation**", UC- Davis, CA, USA, September, 1993.
- Completed a course of "**Polymerase Chain Reaction Techniques**" at UC- Davis, CA, USA, Dec., 1993.
- Attended as audit "**Veterinary Biologics Training Program**" at the Institute for International Cooperation in Animal Biology ( IICAB ) at ISU, Ames, Iowa, USA, May-June, 1996 (personal communication).

**Principle Research & Interest :**

- Advanced Molecular & immunological characterization, pathogenesis and immune response of important viral and bacterial pathogens.
- Development of recombinant vaccines and rapid diagnostic tools for important viral and bacterial diseases, based on the recent molecular and immunological techniques.

**Awards & Prizes :**

- Awarded the **National Encouragement Award in Biological Sciences for 2002**, by the National Academy for Scientific Research and Technology, Egypt, in June 2003.

- ♣ Conducting molecular research projects, either individually or in a team that aim to solve animal disease problems in Egypt.
- ♣ I always keep in touch with colleagues of the international scientific community to share data and expertise.
- ♣ Lab instructions, technical advises and cooperative academic supervision to young researchers in and outside my institute.

### \*\* Previous Positions :

- ▶ **A veterinarian** in a private Large Animal Clinic (1985) in Kerdasah, Giza , Egypt.
- ▶ **A veterinarian** in a private Rabbit Breed Farm (1985 - 1986) in EL-Nobarryia, Egypt
- ▶ **A veterinary specialist, research assistant and assistant researcher** in the **BCG** Researches & Production Unit, **Aerobic Bacterial** Vaccines Dept., and the **Bacterial Diagnostics** Dept., at the Veterinary Serum & Vaccine Research Institute (**VSVRI**), Abbassia, Cairo, Egypt, (1988 - 1994).
- ▶ **Assistant researcher, Researcher and Senior Researcher** in the **Genetic Engineering** Research Dept., VSVRI, Abbassia, Cairo, Egypt (1994 – 2003).
- ▶ **Senior Researcher and Cheif Researcher** in the **RPLD** Dept. (2003 - up to date).
- ▶ **A fellow** in the "**International Lab** of Molecular Biology for Tropical Disease Agents" at the Dept. of Pathology, Microbiology and Immunology, Vet. Med. School, **UC-Davis, CA, USA**. Where, I have shared in projects on development of Recombinant **Vaccines** and Rapid **Diagnostic Kits** for Peste Des Petites Ruminants Virus (**PPRV**), during 1993-1994.
- ▶ **Class Instructor** for a **Molecular Virology Class**, teaching and demonstrating to graduate and undergraduate students: isolation , purification , and gene mapping of nucleic acids (RNA & DNA) and the polymerase chain reaction at the **MIPM Dept., Iowa State University, Ames, IA, USA (1995-1996 )**.
- ▶ Shared a prominent role, as **a Committee Co-Advisor** or a **Lab and Technical Instructor**, helping many colleagues to accomplish their **Masters and Ph.Ds** research projects during **1989 – up to date**.

### Participation in Professional Meetings :

- ♣ 2<sup>nd</sup> Sci. Cong., Vet. Med. Fac., Giza, Cairo Univ., Cairo, Egypt, (Paper), March 1992.
- ♣ 21<sup>st</sup> Arab Vet. Med. Congress, Cairo, Egypt, (Paper), April 1993.
- ♣ Intern. Meet. Sci., UC-D, Davis, CA, USA, November 1993.
- ♣ Confer. Res. Workers Anim. Dis. (CRWAD), Chicago, Illinois, USA, November 1994.
- ♣ 97<sup>th</sup> General Meeting of ASM, Miami, Fl, USA. (Abstract), May 1997.
- ♣ 24<sup>th</sup> Arab Vet. Med. Congress, Cairo, Egypt, (Paper), May 1999.
- ♣ 1<sup>st</sup> Sci. Cong., Vet. Med. Fac. of Beni-Suef, Cairo Univ., Al-Fayoum, Egypt, (Paper), Sept., 1999.
- ♣ 3<sup>rd</sup> Sci Confer. Vet. Med. Res., Vet. Med. Fac., Alexandria Univ., Alexandria, (Paper), Oct., 1999.
- ♣ 5<sup>th</sup> Cong., Egyptian Society for Cattle Diseases, Assiut Univ., Assiut, Egypt, (Paper), Nov., 1999.
- ♣ 5<sup>th</sup> International Congress of Veterinary Virology, Brescia, Italy, August 2000.
- ♣ 6<sup>th</sup> Sci. Cong., Vet. Med. Fac., Giza, Cairo Univ., Cairo, Egypt, March 2000.
- ♣ 25<sup>th</sup> Arab Vet. Med. Congress, Cairo, Egypt. (Paper) May 2001.
- ♣ 1<sup>st</sup> Internat. Sci. Cong., Genetic Eng. and Biotech. Div., Nat. Res. Center, March 15-17, 2004, Giza, Egypt.
- ♣ 7th Sci. Conf., Fac. Vet. Med., Zagazig Univ., June 15-17, 2004, Sharm El-Sheikh, Egypt. (Paper)
- ♣ 1st Confer. Virology, Egypt. Soc. Virol., Cairo University, Dec. 7-8, 2004, Giza, Egypt. (Paper)
- ♣ 4<sup>th</sup>. Intern. Sci. Conf., Mansoura Univ. & Teramo Univ. (Italy), Mansoura, Egypt, April 5-6, 2005. (paper)
- ♣ 4<sup>th</sup> Sci. Conf., Beni-Suef Univ., Fac. Vet. Med., 24-27<sup>th</sup> Sept., 2005. (paper)
- ♣ 7<sup>th</sup> Sci. Conf. Poultry, Egypt. Vet. Poultry Assoc., Sharm El-Sheikh, 6-9 March, 2006.
- ♣ 11<sup>th</sup> Annual Conf. Immunol., Egypt. Assoc. Immunol., Sharm El-Sheikh, Nov.29<sup>th</sup> – Dec.1<sup>st</sup>, 2006.
- ♣ 9<sup>th</sup> Sci. Conf. Fac. Vet. Med., Cairo Univ., Sharm El-Sheikh, 24-27 April, 2007 (paper).

- ♣ 4<sup>th</sup> International Conf. of the Vet. Res. Division, National Res. Centre, February 26-28, 2008, Giza, Egypt.
- ♣ 6<sup>st</sup> Sci. Conf., Vet. Med. Fac. of Beni-Suef, Cairo Univ., Ain El-Sukhna, Egypt, April., 2010.
- ♣ 11<sup>th</sup> Sci. Conf., Fac. Vet. Med., Cairo Univ., Hurgada, 15-18 May, 2011.

## **Research Activities & Publications:**

### **A- Published researches:**

**1♦ "Immune response to foot and mouth disease (FMD) and BCG vaccination in calves challenged with FMD virus".**

**Authors:** Arab R., Abou-Zeid A., Omar A., Soufy H., El-Nakashly S. and Alaa. A. El-Kholy

**Published:** Proc.2<sup>nd</sup> Sci. Cong Vet. Med. Fac., Cairo Univ., 2-4, March 1992, pp: 105-111.

(I have done all of the work as its part of my Master thesis).

**2♦ "Clinical studies on the effect of BCG in protecting calves challenged with FMD virus".**

**Authors:** Arab R., Abou-Zeid A., Omar A., Soufy H. and Alaa. A. El-Kholy

**Published:** Beni-Suef Vet. Med. J., Vol. 2, No. 1, pp: 92-104, 1992.

(I have done all of the work as its part of my Master thesis).

**3♦ "Effect of FMD and BCG vaccines on the blood picture of calves challenged with FMD Virus ". Egypt.**

**Authors:** Arab R., Abou-Zaid A., Omar A., Soufy H. and Alaa. A. El-Kholy

**Published:** J. Path. and Comparat. Pathology, Vol. 1, No. 1, pp: 11-24, 1992.

(I have done all of the work as its part of my Master thesis).

**4♦ "Trial for enhancement of protection against Sunffles in Rabbits with BCG".**

**Authors:** Gergis S., Aboul Saoud S., Dimitri R., Afaf Monazia, El-Belkamy F., Alaa. A. El-Kholy and Abdel Aziz M.

**Published:** Proc. 21<sup>st</sup> Arab Vet. Med. Cong., April 11-15, 1993 & J. Egypt. Vet. Med. Assoc. 53, No.1 & 2, pp: 221-226, 1993.

(I prepared the BCG used and also shared in other immunoassays).

**5♦ "Cloning and expression of the nucleoprotein of Peste des Petits Ruminants virus in Baculovirus for use in serological diagnosis".**

**Authors:** Ismail T., Yamanaka M., Saliki J., Alaa. A. El-Kholy, Mebus C. and Yilma T.

**Published:** *Virology*, 208, 776-778, 1995.

(I have done sequence analysis of the PPRV N gene and confirmed its cloning and expression in baculovirus).

**6♦ "Use of polymerase chain reaction to simultaneously detect and type bovine viral diarrhea viruses isolated from clinical specimens".**

**Authors:** Alaa. A. El-Kholy, Bolin S., Ridpath J., Arab R., Abou zeid A., Hammam H. and Platt K.

**Published:** *Rev. Sci. & Tech. Off. Int. Epiz.*, Vol.17 (3), Dec., 1998.

(I did all the work as its part of my Ph.D).

**7♦ "Biomolecular studies on caprine local isolates of *Pasteurella haemolytica*".**

**Authors :** Eman El-Rawy, Seham El-Zeidy, Alaa. A. El-Kholy and Amina El- Bayomi .

**Published:** J. Egypt. Vet. Med. Assoc., Vol. 58, No. 3, Dec.. 1998.

(I put the research idea & plane, did all protein profiles & western blots and shared writing).

**8♦ " Evaluation of protective immunity induced by a recombinant baculovirus expressing two structural proteins of bovine viral diarrhea virus in calves".**

**Authors:** Alaa. A. El-Kholy, Ghaly H. and Daoud A.

**Published:** *Egypt. J. Immunol.*, Vol. 6 (1), 1999, pp: 163-171.

(I put the research idea & plane, prepared recombinant vaccine, did the clinical & lab studies and all writing).



**9♦ "Molecular and immunological characterization of cross reactive antigens of some *Salmonella* serovars".**

**Authors:** Alaa. A. El-Kholy, Nahed Khamis, Amina El-bayomy and Hussein A.

**Published:** J. Egypt. Vet. Med. Assoc., Vol. 59, No. 2 & 3, **1999**, pp: 395-417. Proc. 24<sup>th</sup> Arab Vet. Med. Cong., Cairo, Egypt. (I put the research idea & plane, did all protien profiles & western blots & ELISAs and shared all writing).

**10♦ "Baculovirus expression of p14 and gp48 of the NADL strain of bovine viral diarrhoea virus and utility for serodiagnosis".**

**Authors:** Alaa. A. El-Kholy, Bolin S., Ridpath J., Arab R., Abou-Zeid A., Hammam H. and Platt K.

**Published:** Beni-Suef Vet. Med. J. Vol. 9, No. 3-B (**1999**), pp: 491-511. Proc. 1<sup>st</sup> Sci. Cong. of Beni-Suef Vet. Med. Fac., Al-Fayoum, Egypt. (I did all work as it's a part of my Ph.D thesis).

**11♦ "Simultaneous infection with rabbit haemorrhagic disease virus and rabbit pasteurellosis in rabbit farms in Egypt".**

**Authors:** Ibrahim I., Abass A., Alaa. A. El-Kholy, Safia Kandil and Hussein A.

**Published:** Alexand. J. Vet. Sci., Vol. 15, No. 3, pp: 567-578, **1999**. Proc. 3<sup>rd</sup> Conf. Vet. Med. Res., Alex. Univ. Alexandria, Egypt. (I did viral and bacterial protein profiles and shared writing).

**12♦ "Comparative polymerase chain reaction assays for detection and genotyping of bovine viral diarrhoea viruses in Egypt".**

**Author:** Alaa. A. El-Kholy

**Published:** Proc. of the 5<sup>th</sup> Sci. Cong., Egypt. Soc. For Cattle Diseases, 28-30 Nov., **1999**, Assiut, Egypt, pp: 164-170. (I have done it all).

**13♦ "Evaluation of a recombinant ELISA antigen for serodignosis of bovine viral diarrhoea virus in infected and immune cattle sera in Egypt".**

**Authors :** Alaa. A. El-Kholy, Ghaly H., El-Sabbagh M. and Samira El-Said

**Published:** Vet. Med. J., Giza Vol. 48, No. 2 (**2000**): 227 - 238.

(I put the research idea & plane, did it all except for animal vaccinations and virus challenge exposure).

**14♦ "Use of PCR and *In situ* DNA hybridization for detection of *Aeromonas hydrophila* infection in Nile Tilapia (*Oreochromis niloticus*)".**

**Autors:** EL-sayed E, Alaa. A. El-Kholy, Hashad M. and Abdel Haleem M.

**Published:** J. Egypt. Vet. Med. Ass., 61, No 3 : 177-189 & 25<sup>th</sup> Arab Vet. Med. Congress, Cairo, Egypt, May (**2001**). (I shared equally in all lab procedure and writing).

**15♦ " Molecular characterization of *Mannheimia haemolytica* extracts and utility in serodiagnosis of pasteurellosis in Egypt".**

**Authors:** Alaa. A. El-Kholy, Eman M. El-Rawy , Manal S. M. and Hussein A. Z.

**Published:** J. Egypt. Vet. Med. Ass., Vol. 64, No. 3, May (**2004**) : 321-343.

(I put the research idea & plane, did all antigens preparations, bacterial protein profiles, western blots, shared equally in immunoassays and almost all writing).

**16♦ "Molecular evaluation of some antigenic extracts of *Corynebacterium pseudotuberculosis* and utility in serodiagnosis".**

**Authors:** Alaa. A. El-Kholy, Aml M. El-Sawah and Elham A.El-Ebiary

**Published:** Proc. 7<sup>th</sup> Sci. Conf. Fac.Vet. Med., Zagaziq Univ. 15-17 June (**2004**), Sharm El-Sheikh, Egypt, pp : 177-189.

(I put the research idea & plane, did all antigens preparations, bacterial protein profiles, western blots, shared equally in immunoassays and did all of the writing).

**17♦ "An approach for improvement of the fowl cholera adjuvanted vaccine in Egypt "**

**Authors:** Nahed I.M.M. Khamis; Alaa. A. El-Kholy and Ahmed M. Daoud

**Published:** Vet. Med. J., Giza, Vol. 52, No. 4, October (2004) : 561-573.

(I put the research idea & plane, did all preparations of Lysate vaccine, bacterial protein profiles, shared equally in other vaccine formulations, immunoassays and did almost all of the writing).

**18♦ "Phylogenetic characterization of some bovine viral diarrhea viruses in Egypt"**

**Authors:** Alaa. A. El-Kholy, Vileek S. and Daoud A.

**Published:** 1<sup>st</sup>. Confer. Virol., Egypt. Soc. Virol., Cairo Univ., Giza, Dec. 7-8, (2004) Egypt & Egypt. J. Virol., Vol. 1 (1), 2004 : 421-435.

(I put the research idea & plane, did all clinical specimens preparations, immunoassays, RNA extractions, RT-PCRs, computer-based sequence alignments and phylogenetic analyses and did all the writing).

**19♦ "Trials for preparation of combined inactivated respiratory virus vaccine containing BVD genotypes I & II, IBR, PI-3 and BRS viruses "**

**Authors:** Zeidan S. M., Samira S. T., El-Sabbagh M. M., Ghaly H. M., Abd El-Sameea A.\*, Iman K. A., and Alaa. A. El-Kholy

**Published:** 4<sup>th</sup> International. Sci. Conf., Mansoura Univ. & Teramo Univ. (Italy), Mansoura, Egypt, April 5-6, 2005: 433-445.

(I shared equally in all lab & animal procedure for vaccine preparation and evaluation and did all the writing).

**20♦ "Preparation of diagnostic Lysate antigens for rapid evaluation of the local Entero-3 vaccine"**

**Author:** Alaa. A. El-Kholy, Aml M. El-Sawah , Zeidan S. M., Wasel M. S. and Daoud A.

**Published:** 4<sup>th</sup> Sci. Conf., Beni-Suef Univ., Fac. Vet. Med., 24-27<sup>th</sup> Sept., 2005.& Beni-Suef Vet. Med. J., Vol. 15 No. 2, 2005 : 184-189.

(I put the research idea & plane, prepared all antigens, shared equally in lab assays and did all of the writing).

**21♦ "Molecular and immunological detection of BHV-1 in clinical specimens".**

**Author:** Alaa. A. El-Kholy

**Published:** *Egypt. J. Immunol.*, Vol. 12 (2), 2005, pp: 125-136.

(I have done it all).

**22♦ "Laser-Raman spectroscopy: A novel approach for sensitive molecular characterization of mycobacterium genomic DNAs"**

**Author:** Mona Abdel Aziz and Alaa. A. El-Kholy

**Published:** *Arab J. Biotech.*, Vol. 9, No. (3), October 2006, pp : 453-466.

(I put the research idea & plane, did all mycobacterium DNA procedure and, shared in the writing).

**23♦ "Genetic characterization of the Egyptian vaccinal strain Abu-Hammad of BHV-1"**

**Authors:** Alaa. A. El-Kholy and K. A. Abdelrahman

**Published:** *Rev. Sci. Tech. Off. Int. Epiz.*, Vol. 25 (3), Dec., 2006, pp: 1081-1095. (Research idea & plane, did all sequencing and phylogenetic analyses, shared equally in all lab procedure and did all of the writing).

**24♦ "Genetic identification of the foot-and-mouth disease virus caused 2006 outbreak in Egypt"**

**Author:** Alaa. A. El-Kholy, Hatem M. T. Soliman , Noha A. Helmy and Adel O. Abdel Rahman

**Published:** *Arab J. Biotech.*, Vol. 10, No. (1), January (2007), pp : 193-206.

(I put the research idea & plane, did all sequencing and phylogenetic analyses, shared all RT-PCRs and all of the writing).

**25♦ " Preparation and preliminary evaluation of a lysate *E. coli* vaccine in poultry".**

**Authors:** Noha A. Helmy, Alaa. A. El-Kholy, Aml M. El-Sawah, Abu Elsoud S. and Adel O. Abdel Rahman

**Published:** 9<sup>th</sup> Sci. 1<sup>st</sup> Internat. Conf., Fac. Vet. Med., Cairo Univ., Sharm El-Sheikh, 24-27<sup>th</sup> April, 2007.

(I put the research idea & plane, did all preparations of Lysate vaccine and shared equally in other experiments)

## 2- "Differentiation among Capripoxviruses by Sequence Analysis and PCR-RFLP of P32 Gene"

*Authors:* K. A. Adelrahman, H. M. T. Soliman and Alaa. A. El-Kholy

### Social Activities:

#### **A member in :**

- ♥ Egyptian Vet. Med. Association.
- ♥ Egyptian Society of immunology.
- ♥ Egyptian Society of Virology.
- ♥ Egyptian Society for Cattle Diseases.
- ♥ Egyptian Vet. Assoc. for Buffaloes Development.
- ♥ Egyptian Society of Poultry.
- ♥ Egyptian Vet. Med. Society for Pathology and Clinical Pathology.
- ♥ American Society for Microbiology (ASM), USA.
- ♥ American Cultural Center – Cairo.
- ♥ A subscriber for Molecular and Cell Biology Journal and ASM news since Jan 1997.

### English Competency:

#### \* Conversational English courses :

- Group "4" grade **B+**; Fall **1991** (American Univ., Cairo, Egypt).
- Group "5" grade **A**; Spring **1992** (American Univ., Cairo, Egypt).

\* International TOEFL score : **543** (March **1993**, AUC, Cairo, Egypt).

References and Transcripts: Available upon request.

### References:

- 1- Prof. Dr **Seham A. El-Zeedy**, Director of VSVRI, ARC, P.O.Box # 131, Abbassia, **Cairo, Egypt**.
- 2- Prof. Dr **Adel O. Abdel Rahman** and Prof. Dr **Fekria El-Bordeni**; Former Directors of VSVRI.
- 3- Prof. Dr **Adel A. Fayed**, Infect. Dis. and Animal Med., Dept., Vet. Med. Fac., **Cairo Univ., Egypt**.
- 4- Prof. Dr. **Ahmed Sanosy**, former Vice Dean for Res. and Grad. studies, Vet. Med. Fac., **Cairo Univ., Egypt**
- 5- Dr. **Julia Ridpath**, National Animal Diseases Center, ARS, USDA, Ames, **Iowa 50010, USA**.
- 6- Dr. **Kenneth B. Platt**, MIPM Dept., Vet. Med. College, ISU, Ames, **Iowa 50011, USA**.
- 7- Dr. **Steven R. Bolin**, MI Dept., Michigan State University, **Michigan, USA**
- 8- Dr. **D-L Hank Harris**, Former Chair of MIPM Dept., Vet. Med. College, ISU, Ames, **Iowa 50011, USA**.
- 9- Dr. **Tilahun Yilma**, VM - PMI Dept., Vet. Med. School, UC-Davis, **California 95616, USA**.