



CURRICULUM VITAE



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1. PERSONAL DATA:

NAME : Ihab Mohamed Ibrahim Moussa
DATE OF BIRTH : 16/10/1969 Cairo Egypt
NATIONALITY AND SEX : Egyptian, Male
SOCIAL STATUS : Married and has three children
MILITARY SERVICE : Completed
RELIGION : Muslim
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1-الجوائز العلمية:

الدكتور ايهاب حاصل علي جائزة الدولة التشجيعية في العلوم من مصر من ا카데미ة البحث العلمي سنة 2005 م وتم تصنيفه ضمن ابرز خمسين عالم من شباب العلماء في مصر في عام 2005. حيث استطاع الباحث من تطوير بعض اختبارات البيوتكنولوجي لسرعة الكشف عن ميكروبات التسمم الغذائي في منتجات اللحوم والألبان كما استطاع الباحث من تحضير بروتين معاد الاتحاد بالهندسة الوراثية للكشف عن ميكروب السل كما تمكن من تحضير المصل الواقي لسم الثعابين والعقارب المصرية.





- He also received many awards including the best thesis at Cairo University on his supervision of master degree thesis.

2 الأنشطة الأكاديمية

الدكتور ايهاب موسى سبق وان تم ترشيحه كعضو تحكيم في لجان ترقية الاساتذة المشاركين والاساتذة في جامعه الطائف وجامعه جزان وجامعه حائل والخرج
الدكتور ايهاب موسى مقرر لجان اختبارات الطلاب في مقررات 499 حدق (مشروع بحث) ومقرر 493 حدق الخاص بتدريب الطلاب في المستشفيات الحكومية داخل منطقة الرياض
الاشراف علي طلاب التدريب بمستشفى الملك سعود للأمراض الصدرية
تحكيم العديد من رسائل الماجستير والدكتوراة في مجال البكتريا الطبية والبيولوجية الجزيئية في كلية العلوم وكلية الصيدلة.

3. ACADEMIC THESIS:

- 1- **Ph.D.:** Thesis titled “Detection of *Mycobacterium tuberculosis* among isolates or directly in affected tissues by using nested PCR, GTZ-BgVV Service Laboratory, Berlin, Germany - Cairo University, Egypt (2000).
- 2- **M.V.Sc:** Thesis titled “Evaluation of tuberculin test and Enzyme Linked Immuno Sorbant Assay for diagnosis of tuberculosis. Cairo University 1996.

4. RESEARCH TECHNIQUES:

- ☐ Gene cloning
- ☐ DNA extraction and purification
- ☐ Labelling of DNA-probes
- ☐ Bacterial transformation and transfection
- ☐ Restriction endonuclease digestion of DNA
- ☐ Recombinant DNA technology.
- ☐ DNA vaccine.
- ☐ Cell counting
- ☐ Gel purification of DNA
- ☐ Polymerase Chain Reaction, Nested PCR, RAPD PCR, RT PCR
- ☐ Gel electrophoresis, Agrose gel and polyacrylamide gel electrophoresis
- ☐ DNA sequencing



- ☐ Skillful statistical analysis using excel, sigma plot, graphpad instat programs.
- ☐ Good computer skills (Excel, Word, PowerPoint).
- ☐ Blotting
- ☐ Alkaline single-cell electrophoresis (Comet-assay)
- ☐ Immunofluorescence staining techniques
- ☐ Fluorescence *in situ* hybridization (FISH-assay; single, double and triple labelling in somatic and germinal cells)
- ☐ Enzyme linked immuno-sorbent assay
- ☐ Mitotic metaphase chromosomal aberration assay
- ☐ Dominant lethal mutations assay ☐ Spectrophotometry
- ☐ Light and fluorescent microscopy (image capturing)
- ☐ Hematological analysis

5. FIELDS OF INTEREST:

1- Microbiology and Molecular Biology:

- Diagnosis by modern techniques using PCR- hyperdization- Fingerprinting- RFLP and RAPD-PCR especially **Foodborne pathogens** and the following organisms (*Mycobacterium tuberculosis* – *Brucella abortus*- *Staphylococcus aureus*, *Salmonella enterica*, *E. coli*, *Listeria monocytogenes* and *Corynebacterium pseudotuberculosis*).
- Recombinant DNA technology, DNA vaccine.

2- Immunology and sero-diagnostic techniques:

Dr. Moussa was given the opportunity to work at the service laboratory, a joint project of the German Agency for Technical co-operation (GTZ) and the BgVV. The project is attached to the section of Immunology and Diagnostics (505) at the BgVV and is designed to offer adapted Laboratory Diagnostic Techniques.

Dr. Moussa was working under the scientific of Dr. Ch. Staak, Director and Professor, and made himself familiar with the following laboratory techniques:

- Slow Serum Agglutination (SAT)



- Rose Bengal Plate Test (RBPT)
- Milk Ring Test (MRT)
- Gel Precipitation Techniques (AGIDT, SRID)
- Ascoli technique
- Complement Fixation Test (CFT)
- Enzyme-Linked Immunosorbent Assay (ELISA)
- Direct and Indirect Fluorescence Antibody Technique (FAT/IFAT)
- Estimation of mineral concentrations in animal sera
- Estimation of serum γ -globulin concentrations with ZnSO_4 turbidity test
- Determination of protein concentrations (Biuret, BioRad®)
- Preparation and preservation of complement
- Preparation of hyperimmune sera
- Preparation of Ig Y from eggs of immunized hens
- Conjugation of antibodies to FITC and HRPO
- Immunoelectrophoresis
- Steric chromatography
- Affinity chromatography

3- Molecular biology:

Diagnosis of infectious disease mainly Foodborne pathogens by (PCR - RFLP - Hybridization) - Preparation of recombinant vaccines and diagnostic proteins on molecular basis depending on my Prolonged experience in this field.

6. MEMBERSHIP IN SCIENTIFIC SOCIETIES:

- Egyptian Association of Immunologists (EAI):

Dr. Moussa is a member of the Egyptian Association of Immunologists and is entitled to all benefits and privileges of professional membership in EAI International Union of Immunologists (IUIS).

- Reviewer for Saudi Pharmaceutical Journal
- Reviewer for African Journal of Biotechnology (AJB)
- Reviewer for Asian Journal of Microbiology, Pakistan
- Reviewer for Biotechnology Progress, USA



الدكتور ايهاب موسي كان رئيسا للجنة الامن والسلامة بقسم النبات والاحياء الدقيقة بكلية العلوم 1435 – 1436 هجريا والان هو عضو في اللجنة

الدكتور ايهاب موسي مسؤول عن تطوير مقرر 140 حلق (General Microbiology) ومقرر المهارات المخبرية بالقسم.

7. MISSION ABROAD:

- Participated in training Programs at the Federal Institute for Health Protection of consumers and Veterinary Medicine (GTZ - BgVV) service laboratory in Berlin – Germany.

8. TEACHING ACTIVITIES:

8. a. TEACHING ACTIVITIES: at Cairo University Since 1992 to 2006

- 1- **Teaching of Microbiology:** (Bacteriology – Mycology- and Immunology) to undergraduate third year students, as well as postgraduates students for M.V.Sc and Ph.D. at Cairo University Since 1992-2006.
- 2- **Teaching of Microbiology , Molecular biology** to undergraduate third year students, as well as postgraduates students for M.V.Sc and Ph.D. , College of Pharmacy and College of Science, *king Saud University, Riyadh Kingdom of Saudi Arabia, 2007-2014*

A- undergraduate Course.

- Teaching theoretical Bacteriology Course.
- Teaching practical Bacteriology Course.
- Teaching practical Mycology Course.
- Teaching theoretical and Practical Immunology Course.

B- Postgraduate Courses:

- 3- Teaching the theoretical and Practical Bacteriology and Immunology of Diploma of Microbiology.
- 4- Teaching the Practical courses for M.V.Sc and Ph.D postgraduates students.
- 5- **Teaching of Genetics and Molecular Biology:** to undergraduate and postgraduates student.

8.b. TEACHING ACTIVITIES: at King Saud University

- 1- **Teaching of general Microbiology course Mic 140** to undergraduate students, College of science, King Saud University.



- 2- **Teaching of Molecular Biology Course Mic 251** to undergraduate students, College of science, King Saud University.
- 3- **Teaching of project research course Mic 499** to undergraduate students, College of science, King Saud University.
- 4- **Teaching of Physiology of Microbiology Mic 355** to undergraduate students, College of science, King Saud University.
- 5- **Teaching of Post graduate Courses; Biodiversity of Microorganism 554** تتج College of science, King Saud University.
- 6- **Teaching of Pharmaceutical microbiology-1 PHT 226:** to undergraduate pharmaceutical students, College of Pharmacy, King Saud University.
- 7- **Teaching of Pharmaceutical microbiology-2 PHT 313:** to undergraduate pharmaceutical students, College of Pharmacy, King Saud University.
- 8- **Teaching of Medical Genetics GEN1303** to undergraduate students, Medical Laboratory Technology Diploma, College of Applied Studies and Community Service at female campus, King Saud University.
- 9- **Teaching of Laboratory management and bio safety SAF1202:** to undergraduate students, Medical Laboratory Technology Diploma at female campus, College of Applied Studies and Community Service, King Saud University.

9. SUPERVISION OF THESIS:

Dr. Ihab Moussa has 2 master degree students and 2 PhD students in addition there are 6 exempted masters Thesis and 2 exempted PhD Thesis.

10. PUBLISHED BOOKS:

الأستاذ الدكتور ايهاب مسئول عن تصميم المقرر الإلكتروني لمقرر 140 حنق لطلبة كلية العلوم جامعة الملك سعود

Co-author in preparation of practical and theoretical Microbiology book for undergraduate and post graduates students.



Co-author in preparation of practical and theoretical Immunology book for undergraduate and post graduate students.

Co-author in preparation of practical and theoretical Genetics and molecular biology book for undergraduate and postgraduates students.

10- Contribution to researcher education and Training

For education, Dr. Ihab is involved in teaching undergraduate students in the field of:

- 1- Medical Bacteriology course. College of Science, King Saud University
- 2- General Microbiology course College of Science, King Saud University
- 3- Molecular biology course College of Science, King Saud University
- 4- Pharmaceutical Microbiology. College of Pharmacy, King Saud University 2007- 2009 .
- 5- Genetics and Molecular Biology, College of Applied Studies and Community Service, KSU.
- 6- Laboratory Safety and Management, College of Applied Studies and Community Service, KSU.

Organizer For training courses, Dr. Ihab Moussa largely involved in organizing of 18 training course in the field of Biotechnology and application of molecular techniques in diagnosis of infectious diseases which was held in Biotechnology Center for Services and Researches, Faculty of Medicine ,Cairo University. During such training course more than 250 participants from Faculty of Veterinary Medicine, Faculty of Medicine, Faculty of Pharmacy, and Faculty of Agriculture and from different Research Center.

Training Course at Center Of Excellence in Biotechnology

Dr. Ihab Moussa largely involved in organizing of 10 training course in the field of

1. Safety measures in the lab.
2. Application of biotechnology techniques.
3. Recombinant DNA technology.



4. Protein synthesis.
5. Primer design and bioinformatics.
6. PCR and its applications.
7. DNA and protein gel electrophoresis.

10- Presentation for the end-user community

Several short scientific letters, brochures, and public seminars were performed by Dr. Ihab Moussa for the end-user community. Dr. Ihab Moussa has published articles to the end users including:

1. **Moussa, I. (2008)** "The role of biotechnology and genetic engineering in serving the community". KSU letter (in Arabic).
2. **Moussa, I. (2009)** "The use of biotechnology in preparation of modern vaccines (biotechnology and vaccines)". KSU letter (in Arabic).
3. **Moussa, I. (2009)** "The role of biotechnology in diagnosis of microbial pathogens associated with different water sources". KSU letter.
4. **Moussa, I. (2009)** "Swine...epidemic walking four legs. KSU letter" (in Arabic).
5. **Moussa, I. (2009)** "It is time to neutralize this enemy (Swine)". KSU letter (in Arabic).
6. **Moussa, I. (2009)** "Swine flu becomes an international epidemic". KSU letter (in Arabic).
7. **Moussa, I. (2009)** Swine flu: question and answer. KSU letter (in Arabic).
8. **Moussa, I. (2010)** " Revolution of biotechnology in preparation of Modern vaccines" in Arabic and in English KSU letter and Nawafth Magazine (KSU).
9. **Moussa, I. M.** "Molecular detection and eradication of Caseous Lymphadenitis in KSA "Education and publicity brochures". (2013-2014).
10. Preparation of awareness CDs for the Veterinarians of the National Center for Research on Agriculture and Livestock explain the postmortem finding in the abattoirs and the clinical manifestation of the disease in the farms. Handout (2013).



11. Education and publicity brochures concerning Caseous Lymphadenitis; causative agent, mode of transmission, mode of infection and how to control the disease. (2013-2014).
12. Education and publicity brochures concerning mode the foodborne pathogens associated with food of animal origin; causative agents, mode of transmission, mode of infection and how to control the disease.(2014).
13. Preparation of handout concerning the microbiological and molecular detection of foodborne infection for the undergraduate and postgraduate students, departments of microbiology, college of science KSU.(2014).

10. LIST OF PUBLICATION:

1. Selim, S.A, **Ihab, M.I**; El-Taweel, M.A. and El-sharnouby, R.M. (1997):“Evaluation du pistage de la tuberculose chez les dromadaires en Egypt”Bull. Anim. Hlth. Prod. Afri 45, 205 – 209.
2. Mohamed, M.; El-Jakee, J.A; Abo-Alyazeed, H.; **Moussa, I.M**; Zahran, A.M. and Soliman, R. (2002):“Preparation and evaluation of the protective efficacy of *Pseudomonas aeruginosa* irradiated vaccine ”Vet. Med. J., 50(4): 709 – 719.
3. Soliman, Y.A. ; Goniem, M.; Naser, E.A; **Moussa I.M**; Ebiary, E.A. and Selim, S.A. (2003): “Cloning and expression of recombinant MPB 70 protein antigen from *Mycobacterium bovis* BCG for diagnosis of tuberculosis” The Egyptian journal of Immunology, 11(2): 21- 29.
4. Abdel-Gawad,I.A.; **Moussa, I.M**; Mohamed, K.F and El-jakee,A,j. (2004):“A Panoramic view of infectious coryza in laying hens with special reference to HG-2 PCR.J. Egypt. Vet. Med. Assoc. , 64 (1): 113-124.
5. **Moussa, I.M**. and Mohamed K,F. (2004):“Comparison between Enzyme Linked ImmunoSorbant Assay (ELISA) using three types of antigens and other serological tests used for diagnosis of brucellosis” J. Egypt. Vet. Med. Assoc., 64 (4): 241-252
6. **Moussa, I.M**; Awad, W.S.A and Ibrahim, A.K. (2004): “Using Fim A gene amplification assay for diagnosis of salmonella infection in diarrheic and contact calves” J. Egypt. Vet. Med. Assoc., 64(5): 81-90.
7. El-Jakee,J.; Hashad, M.; El-Shabrawy, M.; **Moussa, I.M** and Bartella, II. (2004): Characterization of *Corynebacterium pseudotuberculosis* isolated from sheep and goats”. Appl. Vet. Sci. N. R. C., 1 (2): 283-303



8. **Moussa, I. M.**; Goneim, M. and Ibrahim, A.K (2005):“Rapid detection and characterization of shiga toxigenic *Escherichia coli* (STEC) in bovine faecal and milk samples by multiplex PCR”J.Egypt. Vet.Med.Assoc. 65 (1): 19-34
14. **Moussa, I.M**; Hashad, M; Mohmed, K.F;sherif, N. and Soliman,R (2005): “Protective efficacy of *Cerastes cerastes* specific IgY antibodies produced in laying hens” J.Egypt. Vet. Med. Assoc. 65 (1): 35-45.
15. Hashad, M.; **Moussa, I. M.**; Mohmed, K.F.;Sherif, N.A and Soliman, R (2005): “Production of infectious bursal disease virus specific IgY antibodies and evaluation of its efficacy” J.Egypt. Vet. Med. Assoc. 65 (1): 47-57.
16. **Moussa, I. M.**; Nasr., E. A; Soliman, Y, A; Tawakkol, W. and Mohamed, K. F. (2005): “Comparison between the conventional methods used for detection of *Mycobacterium bovis* in milk and the nested polymerase chain reaction.Beni-Suef Vet. Med. J. 15 (1): 21-37.
17. **Moussa, I. M.**; Ashgan, M.M. and Mohmed, K.F (2006): Determination Of Phylogenetic Relationships Among *Escherichia coli* Isolated From Bovine Fecal and Milk Samples By RAPD-PCR Analysis. J. Egypt Vet. Med. Assoc. 66(1): 7-25.
18. **Moussa,I. M.**; Azza S. A.; Mona, A.M.;Waffa A.O. and Ziada, N. A.(2007):Molecular characterization of *Corynebacterium pseudotuberculosis* isolated from sheep by Random Amplified Polymorphic DNA- Polymerase Chain Reaction (RAPD-PCR). BS. VET. MED. J JANUARY 2007 Vol.17 No.1, p.39-49.
19. **Moussa,I. M.**; Azza S. A.; Mona, A.M.;Waffa A.O. and Ziada, N. A.(2007): An Approach For Evaluation of Enzyme Linked Immuno sorbant Assay (ELISA) And Polymerase Chain Reaction (PCR) In diagnosis of caseous lymphadenitis in sheep. 8th sci. Vet. Med. Zag., Conference (31 Aug.- 3 Sept. 2006) Hurghada 393- 402.
20. Kamelia, M. O.; Hany, M. H., **Moussa, I. M.**; Magda, M. S (2008): [The impact of staphylococcal mastitis on the level of milk IL-6, lysozyme and nitric oxide](#). CIMID (Science Direct) 33(1):85-93. (ISI)



21. **Moussa, I. M.**; Ashgan, M. M; and Mohamed, KH. F. (2008): [Molecular Typing of Major Toxins of *Clostridium Perfringens* by Polymerase Chain Reaction](#).J. Egypt. Vet. Med. Ass., 69(2): 147- 164.
22. **•Moussa, I. M.**and Shible, A. M. (2009): [Molecular Characterization of Methicillin-Resistant *Staphylococcus aureus* Recovered from out patient clinic in Riyadh, Saudi Arabia](#). Saudi Med. J., 30(5):611-617. (ISI)
23. EL-Jakee, J.; **Moussa, I. M.**; Mohamed, KH. F. and Mohamed, G.(2009): [Using Molecular Techniques for Characterization of *Escherichia coli* Isolated from Water Sources in Egypt](#). Global Veterinaria, 3(5):354-362.
24. **•Moussa, I. M.**; Gassem, M. A.; Al-Doss, A. A.; Mahmoud, W. A. Abdel Mawgood, A. L. (2010): [Using Molecular Techniques for Rapid Detection of Salmonella Serovars in Frozen Chicken and Chicken Products Collected From Riyadh, Saudi Arabia](#) . African J. Biotech., 9(5): 612-619. (ISI)
25. Kamelia M Osman, **Ihab MI Moussa**, Ashgan MM Yousef , Mona M Aly, Moustafa I Radwan and HA Alwathnani (2010) [Pathogenicity of Some Avian *Salmonella* Serovars in Two Different Animal Models: SPF Chickens and BALB/c Mice](#). Environ. We Int. J. Sci. Tech. 5 (2010) 65-78. (ISI)
26. **•Moussa, I.M.**, Ashgan, M.H., Alwathnani, H.A., Mohamed, K.H.F. and Al-Doss, A.A (2010). [MULTIPLEX POLYMERASE CHAIN REACTION FOR DETECTION AND CHARACTERIZATION OF SHIGA TOXIGENIC *ESCHERICHIA COLI* \(STEC\)](#) African Journal of Biotechnology Vol. 9(28), pp. 4356-4363, 12 July, 2010. (ISI)
27. **Moussa, I.M.**, Ashgan, M.H., Mohamed, M.S. and Al-Doss A.A (2010). [RAPID DETECTION OF SALMOELLA SPECIES IN NEWBORNE CALVES BY POLYMERASE CHAIN REACTION](#) International Journal of Genetics and Molecular Biology April, 2010;2 (4) 62-66.
28. **•Moussa I. M.** and Hessian A. M. (2010). [Rapid detection of community acquired- methicillin resistance *Staphylococcus aureus* recovered from King Saudi Arabia](#). African Journal of Microbiology Research Vol. 4(24), pp. 2804-



2810, 18 December, 2010 (ISI).

29. J. El-Jakee, **I.M. Moussa**, S.A. Nada, Kh. F. Mohamed, M.H. Ashgan and M.L. Mohamed (2010). [Influence of Probiotics Mixture on *Salmonella typhimurium* in Mice. International Journal of Microbiological Research](#) 1 (2): 50-61, 2010.
30. ●Hesham H. Radwan, **Ihab M. Moussa** and Ibrahim A. Alsarra (2011) [Optimization of a fed-batch fermentation process for production of bleomycin by *Streptomyces mobaraensis* ATCC 15003 African Journal of Biotechnology](#) Vol. 10(9), pp. 1690-1695, 28 February, 2011 (ISI).
31. ●Hesham H. Radwan, **Ihab M. Moussa** and Ibrahim A. Alsarra (2011) [Optimization of a fed-batch fermentation process for production of bleomycin by *Streptomyces mobaraensis* ATCC 15003 African Journal of Biotechnology](#) Vol. 10(9), pp. 1690-1695, 28 February, 2011 (ISI).
32. ●Selim S A; Mousa W M; Mohamed Kh F and **Moussa, I M** (2010). [Synergistic Haemolytic Activity and its Correlation to Phospholipase D productivity by *Corynebacterium pseudotuberculosis* Egyptian Isolates from Sheep and Buffaloes. Brazilian Journal of Microbiology](#) (ISI).
33. ●**Moussa I M**, Omnia M E, Amin A S, **Ashgan, M H** and Selim S A (2011) [Evaluation of the Currently Used Polymerase Chain Reaction Assays for Molecular Detection of *Brucella* species. African Journal of Microbiology research.](#) 5(12), pp. 1511-1520, 18 June, 2011 (ISI)
34. ●**Moussa IM**, Al-Qahtani AA, Gasseem MA, **Ashgan M H**, Ghazy AI and Shibl AM (2011) [Pulsed-Field Gel Electrophoresis \(PFGE\) as an Epidemiological Marker for Typing of Methicillin-Resistant *Staphylococcus aureus* Recovered from KSA. African Journal of Microbiology research.,2011](#) 5(12), pp. 1492-1499, (ISI).
35. ●**Ihab M. Moussa**, **Ashgan M. Hessian**. (2011). [Molecular Typing of *Clostridium perfringens* Toxins Recovered from Central Saudi Arabia. Saudi Med J., 2011; Jul ;32 \(7\):669-74. \(ISI\).](#)
36. ●Mohamed M, **Moussa I M**, Kh. F. Mohamed, Ahmed Samir, E. A. Nasr 1., **Ashgan M H** and M. E. Hatem (2011): [BACTEC MGIT 960 TM system for](#)



- [screening of *Mycobacterium tuberculosis* complex among cattle. African Journal of Microbiology research.,2011; 10\(63\), pp. 13919-13923. \(ISI\).](#)
37. ●**Moussa I. M.**, Ashgan M. H., Mahmoud M. H. and Al-Doss A. A.(2011):[Rapid detection of *Salmonella enterica* in food of animal origin collected from Riyadh, Kingdom of Saudi Arabia.](#) African Journal of Microbiology Research.,2011 Vol. 5(15), 2173-2178, . (ISI).
38. ●**Ihab Mohamed Ibrahim Moussa**. (2011).[Finger printing of community acquired-methicillin resistance *Staphylococcus aureus* recovered from Kingdom of Saudi Arabia](#) African Journal of Biotechnology Vol. 10(53), pp. 10939-10947, 14 September, 2011(ISI).
39. ●**Moussa I. M**, Kh. F. Mohamed, Marwah Mohamed, Nasr E. A., Atef M. Shibl, Mounir M. Salem-Bekhit and Hatem M. E.(2011).[Comparison between the conventional and modern techniques used for identification of *Mycobacterium tuberculosis* complex](#) African Journal of Microbiology Research Vol. 5(25), pp. 4338-4343, 9 November, 2011. (ISI).
40. ●Mounir M. Salem-Bekhit, **Ihab Mohamed Ibrahim Moussa**, Muharram M. M. Ahmed Mahmoud Elsherbini and Salim AlRejaie (2011).[Increasing prevalence of high-level gentamicin resistant enterococci: An emerging clinical problem](#) African Journal of Microbiology Research Vol. 5(31) pp. 5713-5720, 23 December, 2011. (ISI).
41. ●Kamelia M Osman, **Ihab M Ibrahim**, Ashgan Yousef, Tanios Nabil,AlAtfeehy Nayerah .[Blood heat shock proteins evoked by some *Salmonella* strains infection in ducks.](#) *World J Microbiol Biotechnol.*,2012;12,1002-9.
42. ●MMSalem Bekhet, **IMI Moussa**,MM Muharram, FA Alanzy, HMHafny. [Prevalence and antimicrobial resistance pattern of multidrug-resistant Enterococci isolated from clinical specimens.](#) Indian J of Medical Microbiology, 2012 30(1): 44-51 (ISI)
43. ●S.A. Selim, W. M. Mousa, K.F. Mohamed, I.M. Moussa. "SYNERGISTIC HAEMOLYTIC ACTIVITY AND ITS CORRELATION TO PHOSPHOLIPASE D PRODUCTIVITY BY CORYNEBACTERIUM PSEUDOTUBERCULOSIS " *Brazilian Journal of Microbiology* (2012): 552-559. (ISSN 1517-8382).



44. ● **Moussa,IM**, SA Kabli, HA Hemeg, SM Al-Garni, AM Shibl: A novel multiplex PCR for molecular characterization of methicillin resistant *Staphylococcus aureus* recovered from Jeddah, Kingdom of Saudi Arabia. Indian J of Medical Microbiology, 2012 30(3): 296-301 (ISI)
45. ● Al-Wathnani,AH, AshganM.H, **Moussa,IM**: [Nested Polymerase Chain Reaction for Detection of *Mycobacterium bovis* in Milk Samples](#). African journal of Microbiology research, 2012. (ISI).
46. ●**Moussa, I. M**; Ashgan, M. H., and Al-Doss, A. A. [Rapid Detection and characterization of *Salmonella enterica* serovars by Multiplex Polymerase Chain Reaction assay](#). African journal of Microbiology research. 2012;11(14)3452-3458. (ISI).
47. ●**Ihab M. Moussa**, Ashgan M. Hessian, Abdulaziz M. Aleisa, , Abdullah A. Al-Arfaj, Mounier M. Salem-Bekhit, Salim A. AlRejai, [Protective efficacy of immunoglobulins Y prepared against *Cerastes cerastes* snake venom in the Kingdom of Saudi Arabia](#) Saudi Med. J. 2012; Vol. 33 (8): 846-851 (ISI).
48. ● Selim S. A., Mousa W. M., Mohamed Kh F., Ashgan M. H. , Al-Arafaj A. A. and **Moussa I. M.** [Evaluation of the synergistic haemolytic activity of phospholipase D produced by *Corynebacterium pseudotuberculosis*](#). African journal of Microbiology research. 2012; 6(46), 7306-7313
49. ●**Moussa I. M.**, Ashgan M. H.2, Abdulaziz M. Aleisa, Abdullah A. Al-Arfaj and Salim A. 1. Rejaie: [Evaluation of the protective efficacy of immunoglobulin Y \(IgY –antibodies \) prepared against *Walterinnesia aegyptia* snake venom at Saudi Arabia](#). African Journal of Biotechnology. 2012 Vol. 11(72), 13726-13731
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61. Mohamed, I. Al-Hazmi , Ashgan M. Hessain, and **Moussa, I. Mohamed**. Genotyping of *Salmonella enterica* Collected from Poultry Farms Located in Cairo, Egypt by Multiplex- PCR. Journal of Food, Agriculture & Environment **2014 (ISI)**. *Journal of Food, Agriculture & Environment Vol.12 (1) : 195 - 198 . 2014*
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69. Essmat M. Gemeay, PhD, Salma A. Moawed, PhD, Essmat A. Mansour, PhD, Nagat E. Ebrahiem, PhD, **Ihab M. Moussa**, MD, PhD, Wafaa O. Nadrah, MD. **The association between diabetes and depression**. *Saudi Med J* 2015; Vol. 36 (10): 1210-1215. **2015 (ISI)**.
70. Ashgan M. Hessain, Abdullah A. Al-Arfaj , Adel M. Zakri , Jakeen K. El-Jakee, Onizan G. Al-Zogibi, Hassan A. Hemeg, **Ihab M. Ibrahim**. Molecular characterization of *Escherichia coli* O157:H7 recovered from meat and meat products relevant to human health in Riyadh, Saudi Arabia. *Journal of Saudi Biological Sciences*. **2015 (ISI)**. [Saudi Journal of Biological Sciences \(2015\) 22, 725–729](#)
71. Abdullah A. Al-Arfaj, Mohamed S. Ali, Ashgan M. Hessain, Adel M. Zakri , **Ihab M. Moussa**. Phenotypic and Genotypic Analysis of Pathogenic *Escherichia coli* Virulence Genes Recovered from Riyadh, Saudi Arabia.



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72. Salha Abdelkareem Selima, Farida Hessain Mohameda, Ashgan Mohamed Hessain, Ihab **Mohamed Moussa**. Immunological Characterization of Diphtheria Toxin Recovered from *Corynebacterium pseudotuberculosis*. Journal of Saudi Biological Sciences. [doi:10.1016/j.sjbs.2015.11.004](https://doi.org/10.1016/j.sjbs.2015.11.004). **2015**

73. Jakeen Kamal El-Jakee, Soumaya Ahmed El-Shafii, Samah Said Ali, Ashgan Mohamed Hessain, Abdullah A. Al-Arfaj, Ihab Mohamed Moussa,. Comparative Studies for Serodiagnosis of Haemorrhagic Septicaemia in Cattle Sera. Journal of Saudi Biological Sciences. **2015 (ISI).**
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74. Ashgan M. Hessain, Abdullah A. Al-Arfaj, Hassan A. Hemeg, Khalid M. Farouk **Ihab M. Moussa**: Evaluation of antibiotic sensitivity test of pathogenic *Escherichia coli* recovered from broiler chicken, Riyadh, Saudi Arabia. Accepted in **will be published in Journal of Animal and Plant Sciences, JAPS 25(6) December 2015 2015 (ISI).**

75. Jakeen K. El Jakee1, Gina M. El Amry, Ashgan M. Hessain, Hassan A. Hemeg, Samy Mohammed Shafei, **Ihab Mohamed Moussa**. Production and Evaluation of Autogenous Vaccine Against Avian Colibacillosis. **Journal of Animal and Plant Sciences, JAPS 25(6) December 2015 2015 (ISI).**

1. COABORATION IN SCIENTIFIC PROJECTS:

- 1- Supra regional GTZ. BgVV project on adapted Diagnostic Techniques in Veterinary Medicine at Federal Institute for Health protection of consumers and Veterinary Medicine (BGVV) service laboratory, Berlin, Germany
Funded by FAO/WHO
- 2- National project for preparation of recombinant vaccine for caseous lymphadenitis in sheep and oedemateous skin disease in buffaloes (2000)



Funded by National Academy of science 2002- 2006

- 3- Cytokines profile in milk from healthy and inflamed bovine mammary gland and its diagnostic potentials

Funded by Cairo University 2004-2006.



- 4- "APPLICATION OF BIOTECHNOLOGY IN FOOD AUTHENTICATION AND SAFETY" CO-INVESTIGATOR" Center of Excellence Programs, King Saud University, Ministry of Higher Education, (CEBR11), SR 2,000,000.1429-1430.
- 5- Production and Site-specific Delivery of Belomycin for Treatment of Cancer, Center of Excellence in Biotechnology Research, Center of Excellence Programs, King Saud University, Ministry of Higher Education, (CEBR6), SR 4,385,000.
- 6- Economical Production of Immunoglobulin IgY Prepared Against Local Snakes and Scorpions Venom in Laying Hens (Principle Investigator) 1430- to 1433.
- 7- Determination of Phylogenetic Relationships of Methicillin-Resistance Staphylococcus aureus (MRSA) Recovered From King Saudi Arabia On Molecular Basis (Principal investigator), 100,000 SR 1430-1433.
- 8- Establishment of an eradication program for controlling *Corynebacterium pseudotuberculosis* infection in small ruminants and camels using recombinant DNA vaccine. (PI), from NPST.1432-1435.
- 9- Molecular Characterization Of Major Foodborne Pathogens Associated with Food of Animal origin and Their Potential Transmission to Humans in the KSA. (PI), from NPST.1434-to date
- 10- The mechanisms of *Acinetobacter baumannii* virulence.NPST. 1436-to date (Post doctor).

Scientific Projects Under Evaluation to be Funded:



- 1- Development of Multiplex PCR for Detection of *Salmonella* Typhimurium and *Salmonella* Enteritidis Strains from food samples Collected from Riyadh.
- 2- Development of Multiplex PCR for Rapid Detection and Characterization of *Corynebacterium pseudotuberculosis* Recovered From King Saudi Arabia.
- 3- Isolation and Molecular Characterization of *Bacillus thuringiensis* Strains From the Soil Collected from Different Localities of the King Saudi Arabia.

11. COABORATION IN INTERNATIONAL CONFERENCES AND SCINTIFIC SYPOSIUM:

- 1- International Conference for applied microbiology, Jena, Germany 22-26/3/2008.
- 2- The international Conference for Nanotechnology Industries “The leading Technology of 21st. Century “Registration No. (00938) during the period of 26- 28/2/2009.
- 3- 1st workshop of the DNA Research Chair, DNA research: A gateway to knowledge economy Building 17, King Saud University, Riyadh, Saudi Arabia.
- 4- Seminar on Recent Advances in Liquid Chromatography and Mass Spectroscopy; on Sunday 15Th of November, 2009 in Marriot Hotel, Riyadh, Saudi Arabia.
- 5- The First International Conference in Biotechnology “Towards Knowledge - Based Economy” February 16-18, 2009, Riyadh, Saudi Arabia Dr. Ihab Moussa Introduce a paper titled “Molecular Characterization of Methicillin-Resistant *Staphylococcus aureus* Recovered from Out Patient Clinic in Riyadh, Saudi Arabia”.Ihab M. Moussa, and Atef M. Shibl.
- 6- Twenty-Fourth meeting of Saudi Biological Society, (Biotechnology: Reality and Application), Medina Almunawarah, at Taibah University in the period of 12-14 Rabia Althani, 1430 H (7-9 April, 2009). As an official speaker, as he explained a paper entitled “Molecular Typing Of Major Toxins of *Clostridium perfringens* by Polymerase Chain Reaction".Moussa,



I.M.; Ashgan M. Mostafa* and Mohamed, KH. F.* Center of Excellence in Biotechnology Research, College of Food and Agriculture Science, King Saud University, Kingdom of Saudi Arabia

- 6- Participate in the activities of the 2009 In Vitro Biology Meeting, Embassy Suites North Charleston, Charleston Carolina USA, during the period of 6-10/6/2009.
- 7- Active participation in the first international Conference for post-graduate students King Saud University, during the period of 16-19/2/2010. As an official speaker, as he explained a paper entitled “MULTIPLEX POLYMERASE CHAIN REACTION FOR DETECTION AND CHARACTERIZATION OF SHIGA TOXIGENIC *ESCHERICHIA COLI* (STEC)”.
- 8- Participated in the activities of 25th meeting of the Saudi biological society title "Nanotechnology in life sciences The participation represented by explaining the latest research titled "Multiplex polymerase chain reaction for detection and characterization of shiga toxigenic Escherichia coli STEC" and "Rapid detection of salmonella species in new borne calves by polymerase chain reaction" and "Using molecular techniques for rapid detection of Salmonella serovars in frozen chicken and chicken products collected from Riyadh, Saudi Arabia".
- 9- Participated in the activities of the fifth international conference (Recent Advances in Laboratory Medicine Conference) that was held during the period of 5th-7th of May 2010 by sending Dr. Ihab Mohamed Ibrahim Moussa as speakers. The participation represented by providing a lecture on "Recent tools and technologies in clinical laboratory" and explains the latest research titled “Molecular Characterization of Methicillin-Resistant *Staphylococcus aureus* Recovered from Out Patient Clinic in Riyadh, Saudi Arabia”.
- 10- Participated in the activities of the AAPS National Biotechnology Conference "Advancing Health Through Innovating in Biotechnology". As an official speaker, as he explained a paper entitled "Development of a New



Medium Containing Date Syrup for Production of Bleomycin by *Streptomyces mobaraensis* ATCC 15003 Using Response Surface Methodology".

- 11- Participated in the activities of the first international conference On Halal food control and exhibition that was held during the period of 12-15th of Feb. 2012 as speakers. The participation represented by providing a lecture on "Role of biotechnology and genetic engineering in GM foods", at the InterContinental Hotel , Riyadh, KSA.
- 12- **I. M. Moussa**, M. H. Ashgan (2013). "Single Point Mutation as a Molecular Tool for Preparation of Recombinant Vaccine Against Caseous Lymphadenitis (CLA) and Oedematous Skin Disease (OSD) in Buffaloes at the Plant and Animal Genome XXI Conference, January 12-16, 2013 at the Town & Country Hotel in San Diego, USA.
- 13- **I. Moussa**, M. H. Ashgan, K. Mohamed, A. Shibl, S. Selim (2013) Biological and Immunological Characteristics of Genetically Modified and Wild Recombinant *Corynebacterium pseudotuberculosis* phospholipase D” 23rd European Congress of Clinical microbiology and Infectious Disease Berlin, Germany, 27 – 30 April 2013.
- 14- MOLECULAR CHARACTERIZATION OF SALMONELLA ENTERIC RECOVERED FROM MAJOR FOOD OF ANIMAL ORIGIN IN KSA.
Moussa, I. Mohamed and Abdullah A. Al-Arfaj. Plant and Animal Genome XXII Conference, San Diego, USA. 10-15 January 2014.
- 15- Genotyping of Salmonella enterica Collected from Poultry Farms Located in Riyadh, KSA by Multiplex- PCR. **Ihab Mohamed Moussa** 1, Ashgan Mohamed Hessain 2, Abdullah Abdulaziz Al-Arfaj1 and Mohamed, 1 Al Hazmi3 . The Clinical Genome Conference, June 10-12, 2014.
- 16- Molecular and Serotyping Characterization of Shiga Toxogenic *Escherichia coli* Associated with Food Collected From Saudi Arabia. **Moussa I. Mohamed**, Ashgan M. Hessain, Mustafa Abudo Gasseem, Saleh, Abdullah Kabli. Cambridge Healthtech Institute(CHI) PEP Talk Conference January, 19-23, 2015 in San Diego, CA, USA.