



## **CURRICULUM VITAE**

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Date and Place of Birth: 20.10.1961, El-Fayoum, Egypt

Biographical Data: Married and have 4 kids

### **HIGH SCHOOL EDUCATION:**

### **UNDERGRADUATE STUDY:**

Department of Zoology, Faculty of Science, Cairo University (1978-1982)  
B.Sc. in Zoology with general grade "Distinction with Class Honor"

Military Service: (1983-1984)

### **POSTGRADUATE STUDY:**

#### **[A] Zoology Department, Faculty of Science, Cairo University**

Pre-Master (1984-1985)  
M.Sc. degree in "Physiology" (June, 1988)

Topic of M.Sc. Thesis: Biochemical, Histochemical and Histopathological Studies on the Role of Zinc in Regulating the Testicular Function in Male Albino Rats

#### **[B] Department of Clinical Molecular Biology, Research Institute for Child Nutrition in Dortmund, Germany (June, 1989-Feb, 1992)**

Ph.D. degree in "Integrated Molecular Physiology" (July, 1993)

Topic of Ph.D. Thesis: Influence of Dietary Zinc Deficiency as well as of Combined Zinc and Protein Deficiency on the Noninvasively Assessed Whole Body Degradation Rates of tRNA, rRNA, mRNA and Muscle Protein in Growing Rats

**[c] Postdoctoral Research Fellow, Tissue Culture Lab, Department of Nutritional Toxicology, German Institute of Nutritional Research (DIFE), Potsdam, Germany (April, 1996-Oct., 1996).**

Studying the protective effect of different antioxidants on quinone and duroquinone toxicity. In vitro study using V79hoR mouse lung fibroblasts.

**[D] Postdoctoral Research Fellow, Department of Bioengineering, Tokyo Institute of Technology, Tokyo, Japan (Oct., 1996-Sept., 1997)**

Dipl. Biotechnology (Bioengineering) (Sept., 1997)

Topic of the Diplome Thesis: Novel Analysis of Plasmid DNA Stability within the Host Cell by Bioluminescence Detection Technique

**[E] Postdoctoral Research Fellow, Department of Molecular Genetics, University of Kaiserslautern, Kaiserslautern Germany (July, 1999-August, 1999).**

Cloning and subcloning of the agarase gene (*dagA*) of *Streptomyces coelicolor* A3(2) in a his-tag vector kit (pQE-30, 31, 32).

### **PROFESSIONAL CARRIER:**

Instructor of Biology, Faculty of Science, Cairo University (1984-1988)

Teaching Assistant, Department of Biological Sciences, Faculty of Science, Cairo University, Giza, Egypt  
(1988-1989)

Research Assistant, Department of Clinical Molecular Biology, Research Institute of Child Nutrition, Dortmund, Germany  
(1989-1992)

Lecturer of Biology, Department of Biological Sciences, Faculty of Science, Cairo University, Giza, Egypt  
(1993)

Postdoctoral Research Fellow, Department of Nutritional Toxicology, German Institute of Nutritional Research (DIFE), Potsdam, Germany  
(April, 1996-Oct., 1996)

Postdoctoral Research Fellow, Department of Bioengineering, Tokyo Institute of Technology, Tokyo, Japan  
(Oct., 1996- Sept., 1997)

Postdoctoral Research Fellow, Department of Molecular Genetics, University of Kaiserslautern, Kaiserslautern Germany (July, 1999-August, 1999).

Associate Professor of Molecular Physiology and Biotechnology, Department of Biological Sciences, Faculty of Science, Cairo University, Giza, Egypt (December, 1999)

Associate Professor of Molecular Physiology and Biotechnology, Department of Biological Sciences, Faculty of Science, King Khalid University, Abha, Kingdom of Saudi Arabia (2000-2007)

Associate Professor of Molecular Physiology and Biotechnology, Department of Medical Lab Technology, Community College at Khamis Mushyat, King Khalid University, Abha, Kingdom of Saudi Arabia (2007-June 2012)

Professor of Integrated and Molecular Physiology, Zoology Department, Faculty of Science, Cairo University, Giza, Egypt (October, 2008-till now)

Head of Integrated and Molecular Physiology section, Zoology Department, Faculty of Science, Cairo University, Giza, Egypt (September, 2015-till now)

General Coordinator of Biology Departments in Biotechnology-Biomolecular Chemistry Program (September, 2015 till now)

### **TEACHING EXPERIENCE:**

#### **Department of Biological Sciences, College of Science, Cairo University, Giza, Egypt**

##### **Undergraduate courses**

Basic Cytology (1997-1998)

Biochemistry (1998- 1999)

Physiology of Digestion and Metabolism for Zoology/Chemistry major (2012-till now)

Physiology of Endocrine glands for Zoology/Chemistry major (2012-till now)

DNA Technology for Biotechnology major (2012-2013)

Molecular Biology (BtBio222) for Biotechnology major (2015-2016)

##### **Postgraduate courses**

Animal Tissue Culture, Basics and Techniques (1997- 1999, 2013-2017)

Biotechnology (1999- 2000)

Molecular Genetics (1999- 2000)

Experimental Design and Data analysis (2014)

Molecular Biotechnology & Biotechnology (2014-2017)

#### **Department of Biological Sciences, College of Science, King Khalid University, Abha, KSA**

Animal Physiology for college of science students, KKU, Abha, KSA (2000-2007)

Human Biology for premedical students KKU, Abha, KSA (2000-2007)

Basic Biology for college of science students, KKU, Abha, KSA (2001-2003)

Basic Histology for college of science students, KKU, Abha, KSA (2002-2003)

Microtechnique for college of Science students, KKU, Abha, KSA (2002)

**Department of Medical Lab Technology, Community College at Khamis Mushyat,  
King Khalid University, Abha, KSA**

Principles of Hematology (2007-2008)  
Clinical Biochemistry (2007-2012)  
Principles of Histology (2008-2012)  
Principles of Physiology (2008-2012)  
Histopathology (2010-2012)

**MEMBERSHIP OF SCIENTIFIC SOCIETIES:**

A member of the Egyptian-German Society of Biological Sciences  
A member of the Egyptian Society of Nutrition  
A member of the Egyptian Society of Experimental Biology  
A member of the Saudi Society of Biological Sciences  
A member of the American Society of Microbiology

**Editorial Board of Scientific Journals:**

Co-Editor of Elsevier-Published JOBZ (Journal of Basic and Applied Zoology-Physiology)

**ATTENDED CONFERENCES AND TRAINING COURSES:**

7<sup>th</sup> International Symposium on Trace Elements in Man and Animals (THEMA 7),  
Dubrovnik, Yugoslavia (May, 1991)

8<sup>th</sup> International Symposium on Trace Elements in Man and Animals (THEMA 8),  
Jenua, Germany (May, 1993)

1<sup>st</sup> Training Program on Pollutants as Toxins, Research Center for Poisons and  
Narcotics (RCPN), Faculty of Science, Cairo University, Giza, Egypt (Dec., 1994)

Annual Conference of the Egyptian-German Society (March, 1996)

Annual Conference of the European Society for Toxicology (EUROTOX 96),  
Alicante, Spain (Sept., 1996)

7<sup>th</sup> Asian Chemical Congress, Hiroshima, Japan (May, 1997)

2<sup>nd</sup> International Conference for Laboratory Technology, Biotechnology, Diagnostics  
and Analysis (INTERLAB98) Cairo, Egypt (October, 1998)

Annual Conference of the Egyptian-German Society (March, 1998)

Annual Conference of the Egyptian-German Society (March, 1999)

Annual Conference of the Egyptian Society of Zoology (March, 1999)

National Conference of the Saudi Society of Biological Sciences, Abha, KSA  
(February, 2002)

Third National conference of the Egyptian Society of Experimental Biology (June 2007)

9<sup>th</sup> International conference of the Egyptian Society of Experimental Biology (23-27 Feb., 2012) Cairo, Egypt

1<sup>st</sup> workshop of Al Tawasul project sponsored by DAAD “Novel Insight Into cancer biology: New Targets and Therapeutic Approach”. Chairperson (11-12 Nov., 2013) Cairo, Egypt.

The 11<sup>th</sup> Annual Congress of Medical Sciences (ACMS): Medical Research between Theory and Applications: Challenges and innovations. National Research Centre, Cairo, Egypt December 17-19, 2013

Workshop on “Biosafety and Responsible Science” held by the Egyptian German Society for Zoology, Faculty of Science, Cairo University, Giza, Egypt April, 15, 2014

Workshop on “Gene Expression Analysis on Large Scale Using Microarray and Real Time PCR techniques. Molecular Biology Lab, Cairo University Research Park, Faculty of Agriculture, Giza, Egypt 29 September- 2 October, 2014

20<sup>th</sup> International conference of Egyptian German Society of Zoology: Modern Trends I Zoology: Current and Advanced Practices where Science and Ethics meet. Marriott Hotel , Cairo, Egypt October 18-20, 2014

2<sup>nd</sup> workshop of Al Tawasul project sponsored by DAAD “Novel Insight Into cancer biology: New Targets and Therapeutic Approach”. Chairperson (16-18 Nov., 2014) Cairo, Egypt.

3<sup>rd</sup> workshop of Al Tawasul project sponsored by DAAD “Novel Insight Into cancer biology: New Targets and Therapeutic Approach”. Chairperson (23-25 Nov., 2015) Cairo, Egypt.

Awareness and training of Egyptian students on Biosafety and biosecurity practices required to properly manage their future careers (30<sup>th</sup> of July 2016, 28<sup>th</sup> of January, 2017)

Teaching research ethics workshop hold by the American Society of Microbiology (23-27 October 2016) Chief of organizing committee

## **FELLOWSHIPS AND RESEARCH GRANTS:**

Research grant for Ph.D. (Channel system) from The German Academic Exchange Service (DAAD) for 2 and half years (1989-1991) in Research Institute for Child Nutrition, Dortmund. Germany. Supervisor: Prof. Dr. med Gerhard Schoech, Prof. of Pediatrics and Clinical Molecular Biology

Postdoctoral research grant from the German academy of Science (DFG) for 6 months (1996) in German Institute of Nutritional Sciences, Potsdam, Germany. Supervisor: Prof. Dr. H. Glatt, Prof. of Toxicology

Postdoctoral research grant From UNESCO for one year (1996-1997) in Tokyo Institute of Technology, Japan. Supervisor: Prof. Dr. Hajime Unno, Prof. of Bioengineering and Biotechnology

Postdoctoral research grant from The German Academic Exchange Service (DAAD) for 2 months in Department of Molecular Genetics, University of Kaiserslautern. Supervisor: Prof. John Cullum, Prof. of Molecular Genetics (july-August, 1999)

The P.I. of a small grant from the American Society of Microbiology (2016-2017) to hold two workshops for biotechnology students on the title: Awareness and training of Egyptian students on Biosafety and biosecurity practices required to properly manage their future careers.

### **TECHNICAL EXPERIENCE**

Affinity gel chromatography  
High performance liquid chromatography.(HPLC)  
Atomic absorption spectrophotometry (AAS)  
UV/Vis spectrophotometry  
Amino Acid Analysis  
Thymidine Incorporation techniques  
Basic cell culture techniques  
In-Vitro Cytotoxicity testing  
In-Vitro Mutagenicity testing  
ELISA technique  
RIA technique  
Radiolabelled thymidine incorporation and B-Scintillation counting  
Nucleic Acids extraction  
Polymerase chain reaction (PCR): conventional and RT-PCR  
Cloning and subcloning using plasmid and cosmid DNA  
Agarose Gel Electrophoresis (AGE)  
Polyacrylamide Gel Electrophoresis (PAGE)  
Isoenzyme separation

### **OTHER EXPERIENCES:**

- A member of the committee for postgraduate studies, Department of Biological Sciences, College of Science, King Khalid University, Abha, KSA (2002-2007).
- A member of the follow-up committee of Research Development in the filed of Biotechnology and Genetic Engineering, Department of Biological Sciences, College of Science, King Khalid University, Abha (2002-2007).
- A member of the committee for postgraduate studies and research, Department of Zoology College of Science, Cairo University, (2013- till now).

- A member of the postgraduate studies and research developing committee, Cairo University under supervision of the former vice president of Cairo University Prof. Dr. Gamal Esmat (Dec 2013-Dec 2014).
  - The coordinator of different affairs of the council of Zoology Department, Faculty of Science, Cairo University (2015-Sept 2017)
  - Head of the postgraduate affairs committee of Zoology Department, Faculty of Science, Cairo University (Sept 2017-till now)
  - Representative of postgraduate affairs committee of Zoology Department in faculty council for postgraduate affairs
  - The Principle Coordinator of the biological departments in Biotechnology Program, Faculty of Science, Cairo University (2015-till now)
  - A member of the managing council of PhD program in Biotechnology
  - A member of the managing group of changing the syllabus of B.Sc. program in Biotechnology
  - Approved Referee for King Abdel Aziz City for Science and Technology in Reyad, KSA for the following research proposals and progress technical reports: (2000-2015).
1. Characterization of placental mesenchymal stem cells (pMSCs): development of a novel migration model
  2. The use of bone marrow-derived mesenchymal stem cells in the treatment of galactosamine- induced liver injury in rats
  3. A Novel Therapy of Bone Defects using Hydroxyapatite Scaffolds seeded with Autologous Osteogenic Progenitors-Derived Mesenchymal Stem Cells
  4. Use of Autologous Mesenchymal Stem Cells in Osteoporosis and Rheumatoid Arthritis
  5. Clinical and molecular characterization of Kinesin superfamily proteins (KIFs) in neurodegenerative disease model and Juvenile Myoclonic Epilepsy in Saudi Arabia
  6. Determination of the effect(s) of polymorphism(s) in specific genes controlling the immune responses in Saudi renal transplant patients.
  7. Study of the relationship between polymorphisms of the Natural Killer Cell receptor (KIR) genes and the outcome of the hematopoietic stem cell transplantation for hematological malignancies in Saudi Arabia

8. Assessment of Efficacy and Safety of Stem cell transplantation in Temporal lobe Epilepsy (TLE) mode
9. The Prevalence and Molecular Diagnosis of Renal Disease in Population from the Eastern Province of Saudi Arabia
10. Role of DNA strand breaks in the radiation protective effect of ginger (*Zingiber officinale*): An in vivo and in vitro study
11. Towards using placental mesenchymal stem cells (pMSCs) in cellular therapy
12. Embryonic versus Neuroectodermal Stem Cell Efficacy In Regenerating Spinal Cord injury in Rat Model
13. Molecular Cytogenetics Characterization of Chromosomal Aberrations in Saudi Children with Acute Lymphoblastic Leukemia and Correlate These Aberrations with Apoptotic and Antiapoptotic Tumor Markers
14. Effects of Human Umbilical Cord Blood Stem Cells on Oocyte Generation Following Chemical Mediated Depletion in Albino Rats
15. Biotechnology- based production of anticancer bioactive metabolites from the wild medicinal plants in Jizan region
16. Toxic Effects of Food Additives and Coloring Agents on the Mothers and Fetuses: Experimental Study in Rats
17. The effect of some plant's extracts on some resistant strain of Mycobacterium tuberculosis, *Pseudomonas eurogenosa* and MRSA
18. Assessment of some plants and natural products used to treat cancer in folk medicine in Saudi Arabia
19. Physiological possibility study of Hepatoprotective and immunopotential actions of *Nigella sativa* seed oil against hypervitaminosis A in adult male rats
20. Hepatoprotective and immunopotential functions of *Nigella sativa* seed oil against hypervitaminosis A
21. Molecular diagnosis of thrombophilia in Saudi population
22. Saudi diet a protective of prostatic cancer: A case-control study in Saudi Arabia
23. Investigation of gene expression profiles associated with the immortalization of



malignant cells

### **Research Projects:**

**Cairo University: Co-Pi** “Bioremediation of EGYPTIAN DELTA WETLAND ECOSYSTEM” (2014-2016).

**Egyptian Research Academy of Science: PI** “Effect of adipose-derived mesenchymal stem cell in treating ovarian dysfunction in rat model” (2015-2017).

**American Society of Microbiology: PI** of a small grant from the American Society of Microbiologist to hold two workshops for biotechnology students on the title: "Awareness and training of Egyptian students on Biosafety and biosecurity practices required to properly manage their future careers" (2016-2017).

**Egyptian Research Academy of Science: PI** “Effect of adipose-derived mesenchymal stem cell in treating Alzheimer’s disease in rat model” (2017-2019).

**Cairo University research project application form 2017: PI** “Biomolecular evaluation of therapeutic potential of some venomous extracts as chemotherapeutic agents in treating hepatocellular carcinoma. In vitro Study”

### **SUPERVISION OF M.SC. AND PH.D. THESES:**

#### **Department of Biological Sciences, Faculty of Science, Cairo University**

1. Physiological and biochemical evaluation of certain plant extracts as antidiabetic agents (M.Sc., awarded)
2. Studies on the effects of some antioxidants on streptozotocin diabetic rats (M.Sc. awarded)
3. Comparative biochemical studies of susceptible and nonsusceptible snails to schistosomal infection (M.Sc. awarded)
4. Taurine profiles in the plasma of the neonates in relation to gestational age and feeding regimen. (M.Sc. awarded)
5. Protective effect of zinc and vitamin C on subacute toxicity of organophosphorous pesticides (Ph.D., awarded)
6. Protective effect of zinc and vitamin E on testicular function of aluminum-intoxicated rats. (Ph.D., awarded)
7. Protective effect of zinc and vitamin C on chronic toxicity of cadmium in male albino rats (Ph.D., awarded)

8. Protective role of antioxidants against hematological and biochemical changes related to aging (Ph.D. awarded)
9. Comparative molecular biological studies of susceptible and nonsusceptible snails to schistosomal infection (Ph.D. awarded)
10. Role of taurine on expression of microRNA 122 and the metabolizing enzymes of glycolytic pathway in hepatocellular carcinoma cell lines (running M.Sc. thesis)
11. The therapeutic role of adipose tissue-derived mesenchymal stem cells and/or taurine in treating ovarian dysfunction in rat model (running M.Sc. thesis)
12. Antineoplastic and apoptotic effects of some ruthenium and glutamic acid nanoparticles on different cancer cell lines (2 running M.Sc. thesis)
13. Therapeutic role of bone marrow-derived mesenchymal stem cells in controlling prognosis of hepatocellular carcinoma in Murine Model (running Ph.D. thesis)
14. Biomolecular Evaluation And Metabolome Profiling Of The Chemotherapeutic Potential Of A Venomous Extract And/Or Sorafenib In Treating Hepatocellular Carcinoma. In Vitro-study ((running Ph.D. thesis)

**Biotechnology Program, Chemistry Department, Faculty of Science, Cairo University**

15. Foxa2 binding site mutation and microRNA 124a expression in relation with gender susceptibility to hepatocellular carcinoma in Egyptian patients (awarded M.Sc. thesis)
16. Biomolecular studies on the role of taurine nanoparticles on Warburg effect during hepatocarcinogenesis in rat model (running M.Sc. thesis)
17. In vitro evaluation of the therapeutic potential of snake venom and/or chemotherapeutic agent in hepatocellular carcinoma (running M.Sc. thesis)
18. Antineoplastic activity of bee venomous extract in treating hepatocellular carcinoma cell line (running M.Sc. thesis)

**SPOKEN LANGUAGES:**

Arabic, English (Excellent), and German (Very Good), French (good)

**Current Research Interest:**

New approaches in treating hepatocellular carcinoma- Effect of natural and synthetic compounds (natural venoms and active venomous extracts and synthetic nanoparticles and nanocomposites).

## List of Publications

### Google Citation indices

	All	Since 2009
Citations	83	40
h-index	6	3
i10-index	4	2

Nourhan Y. Mostafa, Abdel-Rahman N. Zekri, **Emad M. El-Zayat**, Nehal Hussein, Ola S. Ahmed, Faris Q Alenzi, Sherif M. Sherif (2016): FOXA2 DNA Binding Domain Mutation and MiRNA-124 Differential Expression in Relation to Sexual Dimorphism of Hepatocellular Carcinoma in Egyptian Patients International Journal of Advanced Research Volume 4, Issue (1): 157- 169

Mohamed M El-Shazly; Wael A Omar· Yusuf Abd Elaziz Ademerdash; Mona Sayed; **Emad M Elzayat**; Iman IA El- Sebeay; Khalid M Abdel Rahman· Mostafa M Abdel Maged (2016): Area degradation and trace elements pollution in Nile Delta wetland ecosystems. Afr. J. Ecol.

Mohamed M. El-Shazly; **Emad M. El-Zayat**; Wael A. Omar; Iman I. El-Sebaey; Yusuf A Ademerdash ; Mostafa M Abdel Maged ; Mona Sayed; Khalid Abdel Rahman; (2016): Water Cytotoxicity and dioxins bioaccumulation in an Egyptian delta wetland ecosystem. African Journal of Aquatic Sciences.

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**El-Zayat, E.**; Rawi, S. and Ismail, N. (2008): Curative Effect of Selenium on Blood and Brain Monoamines as well as Free Amino Acids Levels in Acute Deltamethrin Intoxication. Res. J. Environ. Toxicol., 2(1): 35-52;

**El-Zayat, E.** (2008): Modulation of Hematological and Biochemical Disturbances due to Subacute Paraquat Toxicity by Vitamin c Supplementation. J. Egypt. Ger. Soc. Zool.

**El-Zayat, E.** (2008): Role of alpha-lipoic acid in protection against acute oxidative stress-induced changes in isoenzyme pattern and activity in female rat. Egypt. J. Exp Biol. (Zool), 4: 115-123

**El-Zayat, E.**; Rawi, S. and Gawish, A. (2008): Hypogonadal dysfunction induced by aluminium intoxication in male rat and the protective role of antioxidants . J. Egy. Ger Soc. Zool. 12: 71-79

**El-Zayat, E.** (2007): Isoenzyme pattern and activity in early hepatocarcinogenesis and the protective role of antioxidants. J. Egypt. Soc. Experiment Biol. 3:17-25

**El-Zayat, E.**; El-Halwagy, M. and Farid, M. (2005): Physiological and biochemical alterations induced by subchronic administration of deltamethrin can be possibly corrected by zinc supplementation in male albino rat. J. Biol. Sci., 5(2): 211-221.

**EI-Zayat, E.** and Amer S. (2003): Protective effects of antioxidants on age-related changes in the electrophoretic patterns of cardiac LDH, hepatic ALP and serum proteins in male golden hamster. *Cell Biochemistry and function*. 21: 137-145

Abdel-Moneim, A. **EI-Zayat, E.** and Mahmoud, S. (2002): Effect of some antioxidants on streptozotocin diabetic rats. *J. Egypt. Ger. Soc. Zool.*, 38A: 213-245.

EI-Shazly, M.; **EI-Zayat, E.** and Hermersdoerfer, H. (2000): Insecticidal activity, cytotoxicity and mutagenicity of ethanol extract of *Nerium oleander* leaves. *Ann. Appl. Biol.* 136: 153-157.

**EI-Zayat, E.**, Hermersdoerfer, H. (1999): Cytotoxicity and mutagenicity of some extracts of *Nerium oleander* leaves in cultured mammalian cells. *J. Egypt. Ger. Soc. Zool.* 29(C): 1-11.

**EI-Zayat, E.** and Hermersdoerfer, H. (1999): *In Vitro* Toxicity and Mutagenicity testing of some extracts of Saffron (*Crocus sativus* L.). *Egypt. J. Zool.* 32:

**EI-Zayat, E.M.** and Xing, X.H. (1999): Assessment of Plasmid Stability During Biodegradation of Pollutant Xenobiotics via a Novel Bioluminescence Detection Technique. *Egypt. J. Zool.* 32: 75-88.

Abdel Moneim, A.; **EI-Zayat, E.M.** and Ahmed, O.M. (1999): Studies on the Effects of Glimperide and Some Antidiabetic Plants on Protein Metabolism of Streptozotocin Diabetic Rats. *J. Egypt. Ger. Soc. Zool.* 28(A): 79-98.

**EI-Zayat, E.**, Hamama, G., Rawi, S., Hussein, L., Mohammed, M. (1999): Taurine content in the breast milk of lactating Egyptian mothers and its relevance to infant growth. *Egypt. J. Zool.* 32: 61-74.

Hamama, G., **EI-Zayat, E.**, Hussein, L., Rawi, S., Mohammed, M. (1998): Plasma taurine profiles of Egyptian neonates and its relation to intra-uterine growth. *Med. J. Cairo Uni.*

**EI-Zayat, E.** (1998): Novel Analysis of Recombinant Plasmid DNA Stability within the Host Cell by Bioluminescence Detection Technique. *J. Union Arab Biol. Cairo.* 9(A): 121-140.

**EI-Zayat, E.M. (1998):** Analysis of the Stability of the Two Recombinant Plasmids pUCD623-*Lux* and pBI221-*Luc* Within *Escherichia coli* via a Novel Bioluminescence Detection Technique. INTERLAB-98, Cairo, Egypt (Poster session, October, 1998)

Hermersdoerfer, H., **EI-Zayat, E.**, Ozierenski, B., Schmalix, W. A., Doehmer, J., Glatt, H. R. (1996): Novel Cell Culture Model For Studying Redox Cycling-Induced Oxidative Stress. Annual Conference of the European Society of Toxicology, EUROTOX, Alicante, Spain (Poster session)

El-Mossallamy, N., Mohammed, H., **El-Zayat, E.**, Ali, A. (1996): Protective Effects of Zinc and Vitamin C Supplementation Against Chronic Cadmium Hepatotoxicity in Albino Rat. J. Egypt. Soc. Toxicol. 17: 21-30.

**El-Zayat, E.**, Yamany, N., Kamal, Z. (1996): Combined Supplementation of Zinc and Vitamin C as Protective Agents Against Chronic Lead Toxicity in Growing Male Albino Rats. I. Liver Function J. Egypt. Ger. Soc. Zool., 20(A): 115-139.

Topp, H., **El-Zayat, E.** and Schoech, G. (1993): The Effects of Dietary Zinc Deficiency on the Whole Body Degradation Rates of Transfer-, Ribosomal, and Messenger-RNA in Growing Rats. 8<sup>th</sup> International Symposium on Trace Elements in Man and Animals (THEMA 8), Dresden, Germany (May, 1993).

El-Malkh, N and **El-Zayat, E.** (1993): Role of Zinc in Regulating the Testicular Function. III. Histopathological Changes Induced by Dietary Zinc Deficiency in Testes of Male Albino Rats (1990). Die Nahrung (Food) 34: 1, 65-73.

Mansour, M., Hafeez, A., Halawa, F., El-Kerdassy, Z. and **El-Zayat, E.** (1989): Role of Zinc in Regulating the Testicular Function. II. Effect of Dietary Zinc Deficiency on Gonadotropins, Prolactin and Testosterone Levels as well as 3 $\beta$ -Hydroxysteroid Dehydrogenase Activity in Testes of male Albino Rats (1989). Die Nahrung (Food) 33: 10, 941-947.

Mansour, M., Hafiez, A., El-Kirdassy, Z., Shada, H. and **El-Zayat, E.** (1989): Role of Zinc in Regulating the Testicular Function. I. Effect of Dietary Zinc Deficiency on Serum Levels of Gonadotropins, Prolactin and Testosterone in Male Albino Rats. Die Nahrung (The Nutrition) 33: 10, 935-940.

### Reference Scientists

(1) Prof. Dr. Akmal Elghor, Prof. of Genetics, Zoology Department, Faculty of Science, Cairo University, Giza, Egypt  
akmalelghor@gmail.com

(2) Prof. Martin Goete, Prof. of Cancer Biology, Department of Obstetrics & Gynecology, Faculty of Medicine, Munster University, Germany  
martin.goette@ukmuenster.de

(3) Buckhard Greve, Prof. of Cancer Biology, Department of Radiology, Faculty of Medicine, Munster University, Germany

(4) Prof. Dr. Mahmoud Abdulaziz, Prof. of Biochemistry and Biotechnology, National Research Center, Dokki, Giza, Egypt  
[mahmoud.ibrahim@mountainview-eg.com](mailto:mahmoud.ibrahim@mountainview-eg.com)

(5) Prof. Dr. Abdel Hady Ali Abdel wahab, Prof. of Biochemistry and Molecular Biology, National Cancer Institute, Giza, Egypt