



## Curriculum Vitae

### **Raida Wajih Khalil**

Office Tel.(+ 962 - 6- 479900 / ext 2250

P. O. Box (1) Philadelphia, 19392- Amman – Jordan  
r\_khalil @ philadelphia..edu.jo / drraidak @ yahoo.co.uk.

### **Personal Data:**

**Name: Raida Wajih Khalil**

**Place of Birth: Kuwait City, Kuwait**

**Nationality: Jordanian**

### **Education**

- **Ph.D** in Molecular Biology, Institute of Medical Sciences, Aberdeen University, UK. 2002

Thesis title: ‘ ‘Characterization and identification of transcription factors that respond to Nutrient in Pancreatic beta cells’ ’

<http://opensigle.inist.fr/handle/10068/597701>

- **MSc. (Incomplete)**, Biochemistry Department, Kuwait University, Kuwait
- **B.Sc.** Honours degree in Microbiology (Major) Biochemistry (Minor) Kuwait University, Kuwait

### **Research Area**

- The Molecular mechanism of mammalian gene expression *in Vitro*
- Human Molecular genetics analysis
- Medical Genetics
- Molecular Diagnostics

### **Experience**

1-**Head, Department**-Biotechnology and Genetic Engineering Department  
Philadelphia University -Jordan **from Academic Year 2005/2006-present**

2-**Assistant professor**- Department of Biotechnology and Genetic  
Engineering at Philadelphia University- Jordan from academic year  
**16/2/2003, 2003/2004present**

5- **Lab Demonstrator**, Department Of Biology-University of Aberdeen UK  
2001-2002

6-**PhD Student-Aberdeen University-United Kingdom (UK)**

1999-2002

7- **Lab Supervisor (Cytogenetic and Molecular Genetics sectors),**  
**Genetic laboratory, Medical School, Jordan University, Jordan**  
1992-1998.

8-**MSc Student, Biochemistry Department, Kuwait University, Kuwait**

1990-1991

9- **School Teacher (Biology) –School–Kuwait**

1989(Second semester)

## **Publications**

### **a- Articles in Refereed Journals**

1-B. Shabsoug, **R. Khalil**, N. Abuhafeil, Enhancement of Natural Killer Cell Activity In Vitro Against Human Tumor Cells by Some Plants From Jordan. **Journal of Immunotoxicology**,(2008) 5:279–285. (ISSN: 1547-691X)

<http://www.ncbi.nlm.nih.gov/pubmed/18830888> (Article-pubmed)

<http://informahealthcare.com/loi/imt> (Journal- home))

[http://science.thomsonreuters.com/cgi-](http://science.thomsonreuters.com/cgi-bin/jrnlst/jlresults.cgi?PC=MASTER&ISSN=1547-691X)

[bin/jrnlst/jlresults.cgi?PC=MASTER&ISSN=1547-691X](http://science.thomsonreuters.com/cgi-bin/jrnlst/jlresults.cgi?PC=MASTER&ISSN=1547-691X) (Journal-Thomson)

2-**Raida Khalil**, Nizar Abuharfeil, Barakat Shabsoug. The Effect of *Crataegus Aronica Aqueous* Extract in Rabbits Fed with High Cholesterol Diet. **European Journal of Scientific Research**, (2008), 22:352-360 (ISSN: 1450-216X)

<http://www.eurojournals.com/ejsr%2022%203.htm> ( Article-List)

<http://www.eurojournals.com/EJSR.htm> (Journal-Home)

3-Basma Mustafa, Nazih Mustafa, Muhannad Kashmoola, **Raida Khalil**

The Relation between Estrogen Level, Anti-Ro (SSA), Anti-La (SSB) & Secondary Sjogren's Syndrome Patients, **European Journal of Scientific Research**, (2009), **31: 184-187**. (ISSN:1450-216X)

<http://www.eurojournals.com/ejsr%2031%202.htm> (Article list)

<http://www.eurojournals.com/EJSR.htm> (Journal-Home)

**4-Raida Khalil**, Fawzi Al-Sheyab, Emran Khamaiseh, marwan, Marwan Abu halaweh, Hassan A. Abder-Rahman. Screening of mutations in the GCK gene in Jordanian maturity-onset diabetes of the young type 2 (MODY2) patients. **Genetics and Molecular Research**, (2009), **8: 500-506**.( ISSN:1676-5680)

<http://www.ncbi.nlm.nih.gov/pubmed/19551638> (Article- Pubmed)

[http://www.funpecrp.com.br/gmr2008b/materias.asp?sub\\_secao=1&id\\_pagina=3](http://www.funpecrp.com.br/gmr2008b/materias.asp?sub_secao=1&id_pagina=3) (Journal-Home).

[http://science.thomsonreuters.com/cgi-](http://science.thomsonreuters.com/cgi-bin/jrnlst/jlresults.cgi?PC=MASTER&ISSN=1676-5680)

[bin/jrnlst/jlresults.cgi?PC=MASTER&ISSN=1676-5680](http://science.thomsonreuters.com/cgi-bin/jrnlst/jlresults.cgi?PC=MASTER&ISSN=1676-5680) (Journal-Thomson)

5-Hantash Abed El-lalil, **Raida Khalil**, Muna lallad ,Muna Bustami , Fuad AI-Jawad' and Abdul lalil Thwaini. *Mec A* and *PVL* Genes in Methicillin Resistant *Staphylococcus aureus* from Nasal Carrier Individuals Exposed and Not Exposed to Hospital Environments. **Arab Journal of Pharmaceutical Sciences**, (2009), 3(ISSN: 1683-0369)

<http://www.emro.who.int/emrjorlist/default.aspx?lit=A> (Journal information directory)

<http://www.emro.who.int/emrjorlist/details.aspx?docn=3834> (Journal-Home)

6-M. Khanfar, **R. Khalil**, A. AbJaffal. Evaluation of the Preserving Efficacy of Different Cough Syrups. International Journal of pharmacology, 2009. (ISSN:1811-7775)

<http://scialert.net/abstract/?doi=ijp.2009.319.322>(Article -Home)

<http://scialert.net/jindex.php?issn=1811-7775> (Journal -Home)

[http://scientific.thomsonreuters.com/cgi-](http://scientific.thomsonreuters.com/cgi-bin/jrnlst/jlresults.cgi?PC=MASTER&ISSN=1811-7775)

[bin/jrnlst/jlresults.cgi?PC=MASTER&ISSN=1811-7775](http://scientific.thomsonreuters.com/cgi-bin/jrnlst/jlresults.cgi?PC=MASTER&ISSN=1811-7775) (Journal- Thomson)

7- **Raida Khalil**, Mai Khanfar, Marwan Abu Halaweh, Muhanned Yacoub and Mona Bustami. Assessment of the preserving efficacy of the pharmaceutical Syrups to Identified Air-Borne Microorganisms. **Trends Journal of Applied Sciences**, Accepted , May 2010.( ISSN: 1819-3579)

<http://scialert.net/jindex.php?issn=1819-3579> (Journal- home)

[http://scientific.thomsonreuters.com/cgi-](http://scientific.thomsonreuters.com/cgi-bin/jrnlst/jlresults.cgi?PC=MASTER&ISSN=1819-3579)  
[bin/jrnlst/jlresults.cgi?PC=MASTER&ISSN=1819-3579](http://scientific.thomsonreuters.com/cgi-bin/jrnlst/jlresults.cgi?PC=MASTER&ISSN=1819-3579) ( Journal-Thomson)

### **\*Publications before PhD**

8- Amir S. Najim Al-Din, Ashraf Kurdi, Ammar Mubaidin, Mohammed El-Khateeb, **Raida W. Khalil**, Abdel-Latif Wriekat .Epidemiology of multiple sclerosis in Arabs in Jordan: a comparative study between Jordanians and Palestinians. *Journal of the Neurological Sciences* .1996, **135: 162-167.**  
[http://www.jns-journal.com/article/0022-510X\(95\)00276-8/abstract](http://www.jns-journal.com/article/0022-510X(95)00276-8/abstract)  
 (Article Home)

9-A.S.Najim Al-Din, M. El-Khateeb, A. Kurdi, A. Mubaidin, A. Wriekat, Ahmed Al-Shehab, **Raida W. Khalil**. Multiple sclerosis in Arabs in Jordan. *Journal of the Neurological Sciences*. August 1995, **131:144-149**  
[http://www.jns-journal.com/article/0022-510X\(95\)00092-G/abstract](http://www.jns-journal.com/article/0022-510X(95)00092-G/abstract)  
 (Article-home)

### **b- PEER REVIEWED Manual**

- Molecular Biology (peer reviewed) - Lab manual -2007, Prepared by **Raida Wajih Khalil**, (PhD Molecular Biology). External reviewed. Printing Financially support from the Research Deanship-Philadelphia University.

### **C-Abstract (Oral and Poster)-Proceeding**

1- **Raida W. Khalil** “The association between Toll-Like Receptor 4(TLR4) gene polymorphism and Jordanian type 2 Diabetes”. (Abstract –Oral) the *International Journal of Arts & Sciences (IJAS)* conference which will be held at Bad Hofgastein’s Kungress Zentrum-Austria (May 30 to June 3, 2010).  
<http://www.internationaljournal.org/norica.html>  
 (Conference-Home)

2-Mahmoud N. Abo-Shehada, **Raida Khalil** & Marwan Abu-Halaweh Seroprevalence and zoonotic potential of *Neospora* species infection in Jordanian women with miscarriage ( Abstract-Poster). **British Society for Parasitology Spring Meeting and Trypanosomiasis & Leishmaniasis Seminar. Cardiff University, Wales, UK (March 29th–April 1<sup>st</sup> 2010).**  
<http://www.bsp.uk.net/events.php?id=8> (BSP 2010 Spring Meeting –Home).

3- **Raida W. Khalil**. Characterization and Identification of the Negative Regulatory Element (NRE) Binding Transcription Factors (TFs) within the Human Insulin Promoter. (Abstract-Oral). **5th Congress of Scientific Research Outlook in the Arab World Scientific innovation and Sustained Development (SRO 5) 26-30 October 2008. Fez, Morocco:**

### **TWO AWARDS obtained:**

**A- Fakhri Bazzaz (Distinguished scientist)-Award**

**B- Best Paper Award-Biotechnology**

<http://www.astf.net/site/zone/zone.asp?OGZId=10245>

**(Conference-Home)**

4- **Raida W. Khalil.** " The Expression of sterol regulatory binding proteins (SREBs) in The pancreatic beta cells" (**Abstract-Oral**) **Arab Women in Academic Science and technology for Sustainable Development, Jordan 28-30 April 2008**

4-**Raida Wajih Khalil**, Kevin Docherty. "The sterol regulatory binding protein role in regulating the insulin gene expression". (**Abstract-Poster**) **Experimental Biology Washington DC, USA, 17-21 April-2004**

[http://www.aai.org/prog\\_eb2004/default.htm](http://www.aai.org/prog_eb2004/default.htm)

(Conference-Home)

\* **Abstract (Oral and Poster)-Proceeding before PhD**

5-M. El-Khateeb, **Raida W. Khalil**, Genetic Diagnosis of Contiguous gene syndrome in Jordan",. (Poster). **First International conference of the faculty of Medicine and the third International conference of the German-Arab Medical Association. 1998, Jordan**

6-M. El-Khateeb, **Raida W. Khalil**, Fragile-X syndrome in Jordan. (**Poster**) **First International conference of the faculty of Medicine and the third International conference of the German-Arab Medical Association, 1998. Jordan**

7-M. El-Khateeb, **Raida W. Khalil**, Prenatal Diagnosis, Genetic laboratory experience"(Poster). **10th Symposium on Molecular Biology of Haematopoiesis and treatment of leukaemia and Lymphomas, 1997 Germany.**

8-M. El-Khateeb, **Raida W. Khalil**, Chromosomal analysis of Genetic diseases, (Poster). **Fifth conference of the union of the Arab paediatrics societies, the fourth Jordanian-Spanish Medical conference .1995, Jordan**

**Cultural, and Academic activities**

**A-Research Activities/ research Papers submitted for publication:**

**1-** M. Abuhaleweh, **R. Khalil**, M. Baushehada. Neospora supervalence among Horses in Jordan. **Sponsored by Philadelphia University, Submitted**

**2-** M. Abushehada., **Raida Khalil**, M. Abuhaleweh, Neospora supervalence among aborted Jordanian Women. **Sponsored by Philadelphia University, Submitted**

**3-** Hasan Abder-Rahman, Yahya Ismail, Ashraf Dawood, **Raida Khalil\***, Fawzi Al-Sheyab. *CYP2D6 and CYP3A4\*1B* genes Polymorphism and Susceptibility to Atherosclerosis in Jordanian populations. **Submitted**

**4-** Bustami M, **Khalil R**, Rawashdeh M, Aznarez I, Markiewicz D, Tzountzouris J, Al-Khateeb M, Tsui LC, Zielenski J. Complex spectrum of CFTR

mutations and very low frequency of the  $\Delta F508$  allele in the cohort of Jordanian CF patient **Submitted.**

5- Al-Dweik N<sup>\*</sup>, Abder-Rahman H, **Khalil R.** The Effect of Aluminum Phosphide( ALP) on GLUT2 Gene Expression in Liver Cells in Rats. **Submitted**

6- Barakat Shabsoug, **Raida Khalil.** Zinc Content in Human Hair of Normal and sick subjects. **Submitted**

7- Khaled Mahmood Al-Qaoud ( Main investigator), **Raida Wajih Khalil (Co- Investigator)**, Production of human non-immunogenic camel anti-IgE nanobodies for asthma treatment purposes C. **Supported by the Scientific Research Fund, Ministry of Higher Education (120,000 JD).**

**B-Technical Editor in the Editorial Board Science alert Journals. Peer Review System, Biology Field-Feb-2010-Present for 5 journals:**

a- Journal of Applied Sciences (ISSN Print: 1812-5654, ISSN Online: 1812-5662)

<http://www.scialert.net/eboard.php?issn=1812-5654> (Editorial board)

[http://scientific.thomsonreuters.com/cgi-](http://scientific.thomsonreuters.com/cgi-bin/jrnlst/jlresults.cgi?PC=MASTER&ISSN=1812-5654)

[bin/jrnlst/jlresults.cgi?PC=MASTER&ISSN=1812-5654](http://scientific.thomsonreuters.com/cgi-bin/jrnlst/jlresults.cgi?PC=MASTER&ISSN=1812-5654) (Journal-Thomson)

b- Asian Journal of Biological Sciences (ISSN: 1996-3351)

<http://www.scialert.net/eboard.php?issn=1996-3351>(Editorial board)

[http://scientific.thomsonreuters.com/cgi-](http://scientific.thomsonreuters.com/cgi-bin/jrnlst/jlresults.cgi?PC=MASTER&ISSN=1996-3351)

[bin/jrnlst/jlresults.cgi?PC=MASTER&ISSN=1996-3351](http://scientific.thomsonreuters.com/cgi-bin/jrnlst/jlresults.cgi?PC=MASTER&ISSN=1996-3351)( Journal-Thomson)

c- Journal of Biological Sciences (ISSN print: 1727-3048; ISSN Online: 1812-5719)

(<http://www.scialert.net/eboard.php?issn=1727-3048> (Editorial board)

[http://scientific.thomsonreuters.com/cgi-](http://scientific.thomsonreuters.com/cgi-bin/jrnlst/jlresults.cgi?PC=MASTER&ISSN=1727-3048)

[bin/jrnlst/jlresults.cgi?PC=MASTER&ISSN=1727-3048](http://scientific.thomsonreuters.com/cgi-bin/jrnlst/jlresults.cgi?PC=MASTER&ISSN=1727-3048) (Journal-Thomson)

d- Biotechnology (ISSN print: 1682-296x; ISSN Online: 1682-2978)

<http://www.scialert.net/eboard.php?issn=1682-296x>( Editorial board)

[http://scientific.thomsonreuters.com/cgi-](http://scientific.thomsonreuters.com/cgi-bin/jrnlst/jlresults.cgi?PC=MASTER&ISSN=1682-296x)

[bin/jrnlst/jlresults.cgi?PC=MASTER&ISSN=1682-296x](http://scientific.thomsonreuters.com/cgi-bin/jrnlst/jlresults.cgi?PC=MASTER&ISSN=1682-296x)( Journal Thomson)

e- Research Journal of Environmental Toxicology ( ISSN print: 1819-3420)

<http://scialert.net/eboard.php?issn=1819-3420> (Editorial board)

[http://scientific.thomsonreuters.com/cgi-](http://scientific.thomsonreuters.com/cgi-bin/jrnlst/jlresults.cgi?PC=MASTER&ISSN=1819-3420)

[bin/jrnlst/jlresults.cgi?PC=MASTER&ISSN=1819-3420](http://scientific.thomsonreuters.com/cgi-bin/jrnlst/jlresults.cgi?PC=MASTER&ISSN=1819-3420) (Journal-Thomson)

**C-Examination and Research Advisory committees/ Co-supervisor MSc Thesis:**

**-Co-supervisor MSc student in collaboration with Dr. Hasan Abd-Rahman (JU-faculty of Medicine), From 2007-2009.**

**\*-External examiner for MSc theses in material research at:**

- 1-University of Jordan-Faculty of Medicine (Toxicology)-April 2005.**
- 2- Jordan University for Science and Technology-faculty of Science - (Genetics)- June 2007.**
- 3- Jordan University for Science and Technology-faculty of Science-December (Genetics)2008.**
- 4- Faculty of Science- (Biotechnology and Genetic Engineering) Yarmouk University-May 2009.**
- 5- Faculty of Medicine-Jordan University-July 2009**
- 6- Faculty of Science Biotechnology and Genetic Engineering -Yarmouk University-Nov. 2009**
- 7- Faculty of Science-(Genetic) Hashimate University-Jan. 2010**
- 8- Faculty of Pharmacy –Jordan University-Feb- 2010-**
- 9- Faculty of Medicine –Jordan University- March 2010**
- 10- Faculty of Science –Jordan University of Science and technology May 2010**

**D-Consultation, Workshop, Meeting, Symposiums, Seminars and Training Activities:**

- 1- Member in the Consultation committee of the scientific Incubators-Center of Innovation –Philadelphia University from March 2010-Present.**
- 2-Principal Organizer of ‘Karyotype’ training course’ from 30 to 31 /January 2009, in the MONOJO-Jordan**
- 3- Principal Organizer o Karyotyping-Cytogenetic analysis workshop 13-14 June 2008 MONO JO-Jordan**
- 4- Participant in the Organizing Committee for the Fourth Science day (24<sup>th</sup> May 2010), Faculty of Science-Philadelphia University.**
- 5- Participant in the Organizing Committee for the Third Science day (18<sup>th</sup> May 2009), Faculty of Science-Philadelphia University.**
- 6- Principal Participant in the Organizing Committee for the Second Science day (19<sup>th</sup> May 2008), Department of Biotechnology and Genetics Engineering-Faculty of Science-Philadelphia University.**
- 7- Principal Participant in the Organizing Committee for the First Jordanian/Swedish Biotechnology & Fermentation Symposium, BioProcess & Fermentation Biotechnology (26-27/3/2007), Department of Biotechnology and Genetics Engineering-Faculty of Science-Philadelphia University**
- 8- Principal Participant for the First Science day (28 November/2005), Department of Biotechnology and Genetics Engineering-Faculty of Science-Philadelphia University.**

**9-Develop E-course (Biology: Basic Concepts.) in collaboration with Dr. Raed Kanan and Dr. Lolita Qouta for AVICENNA VIRTUAL CAMPUS PROJECT [PHILADELPHIA University]-2006.**

**10- Research mission for one-month with Prof. Marshall Stark and the Resolvase group, on 'DNA site-specific recombination', carried out in the Institute of Biomedical and Life Sciences-University of Glasgow-UK Aug. 2005(Training)**

**11-Principal Organizer of 'human Cytogenetics training course' from 18 to 30 /September 2005, in the Department of Biotechnology and Genetic Engineering – Faculty of Science- Philadelphia University.**

#### **E- Teaching Experiences**

##### **Courses taught:**

- 1- Introduction to Biotechnology (240281)**
- 2- Molecular Biology(240386)**
- 3- Molecular Biology-Practical (240387)**
- 4- Applied Molecular Biology (240484)**
- 5- Applied Molecular Biology-Practical (240485)**
- 6- Cytogenetic (240335)**
- 7- Cytogenetic Practical (240336)**
- 8- Bioethics (240491)**
- 9- Research Projects (240499)**
- 10- Training field (240494)**

#### **F-University and Departmental Committees**

- 1- Faculty and Departmental officer in the Quality Assurance Committee (Sept. 2005-present)**
- 2- Faculty representative in the University Council 2006**
- 3-Faculty Council (Sept. 2005-present)**
- 4-Faculty Scientific Research Committee**
- 5- Department and Faculty Exams Committee (Sept. 2005-present)**
- 6- Curriculum advisory committee (Sep. 2005-Present)**
- 7- Department Web page committee (Sep. 2005-Present)**
- 8- Learning resources committee (Sep. 2005-Present)**
- 9- Principal Member-Laboratories committee (Sep. 2005-Present)**
- 10- Social committee**

#### **G-Awards & Merits:**

**1 -Two Awards from The 5th Congress of Scientific Research Outlook & Technology Development in the Arab World (SRO5);“ *Scientific Innovation and Sustained Development*” Organized by Arab Science & Technology Foundation (ASTF) In Cooperation with Ministry of National and Higher Education, Professional Training and Scientific Research-Morocco Oct 2008-11-09**

**a- Fakhri Bazzaz (Distinguished scientist)-Award**

**b- Best Paper Award-Biotechnology**

**2-Faculty of Science, Award for first-place BSc. Microbiology/Biochemistry, University of Kuwait.**

## **H- Community Activities**

- 1- Member in the Philadelphia Magazine Editorial Board from 2009-present.**
- 2. -Membership in Administrative Committee of Cystic Fibrosis association- Jordan 2008-present**
- 3-Volunteer lecturer for a series of lectures in Success skills with Enjaz-Jordan- March 2008**

## **Conferences, Symposiums, Seminars & Workshops attended (2003-present):**

- 1-Outcomes-based curriculum design and implementation, Workshop at Philadelphia University-Jordan 17-18 May 2010**
- 2- AACR international Conference, Advances in cancer research: from the laboratory to the clinic, Dead Sea, Jordan, March -2010.**
- 3- The 7th Arab Conference for Antimicrobial Agents. Beirut, Lebanon November 6-8, 2009,**
- 4-The 2<sup>nd</sup> KHIBC Mena Cancer Research Conference, Amman, Jordan, October 2-3, 2009,**
- 5-5<sup>th</sup> Jordanian International Conference for Infertility, Amman 29<sup>th</sup> May 2008.**
- 6-Opening Ceremony for the King Hussein Institute for Biotechnology and Cancer 2008/3/31 Jordan(**
- 7- McGraw-Hill Biology Symposium with Dr. Robert J. Brooker "Author"  
Amman. 2008 April,.**
- 8-AACR international Conference, Advances in cancer research: from the laboratory to the clinic, Dead Sea, Jordan 16-19/3/2008.**
- 9- MIT –E learning Conference, Dead Sea , Jordan, 28-30 Nov 2007**
- 10-Biotechnology Symposium – Shoman- Jordan, Oct. 2007**
- 11- First National Seminar on Development of e-learning Courses within Jordan Aveicenna Knowledge Centre, Philadelphia University, February 8, 2006.**
- 12- EUMEDIS International Conference- UNESCO, Dead Sea Resort-Jordan. 17-18 April 2005.**
- 13- The Jordan Hospital IVF and Genetics Centre First Symposium in the application of stem cells and PGD for Thalassemia patients in cooperation with the Jordan Society of obstetricians and Gynecologists, Holiday Inn-Amman, April 21<sup>st</sup> 2005**

**14-King Hussein Cancer Center Symposium on Women's Cancers In cooperation with National Cancer Institute-USA and the International Gynecologic Cancer Society-USA, Le Royal Hotel, Amman-Jordan, 22-24 September, 2005.**

**15-The first international congress organized by JSFG, member of IFFS, organized by the Jordanian society for fertility and Genetics. Jordan, 7-9 September, 2005**

**16- International Education and Information Exhibition-Ministry of Higher Education and Scientific Research. Grand Hyatt Amman. 18-20 may 2005**

**17-Fourth conference Biological sciences, Biological sciences & society service & Obstacles, Jordan. Yarmouk University, 12-14 October, 2004.18-Jordan National Tempus Day 2004, Amman-Jordan, 9<sup>th</sup> October 2004**

**18- Drug Biotechnology and Medicinal Plants, Amman-Jordan, 9-11October 2004**

**19- First annual meeting of conceptual Environment and Distance Learning: the Present and the Future. Philadelphia University, Jordan, December 2-4, 2003.**

**20-The Ninth Science of Jordan Society of Scientific Research, Ramtha and Amman Jordan, October 6-8,2003.**

**21-Real time PCR applications, 23 March, 2005 Al-Wafi Group for marketing and Int. trade Co. Ltd, Jordan**

**22- Teaching and learning Strategies, held by Development and academic Training centre, Philadelphia University, Jordan, from 21/10/2002-27/10/2002.**