



مركز أبحاث الشرق الأوسط للجينات والتقنية البيولوجية

Middle East Genetics and Biotechnology Institute (MEGBI)

الشركة اللبنانية الألمانية للبيوتكنولوجيا

مركز القبيسي للدراسات والتنمية - راسنحاش - قضاء البترون - لبنان

LG Biotech

Qubaisi Center for Research and Development, Ras- Nhache, Batroun, Lebanon

رقم ٣٩٩ في سجل التجاري بيروت مسجل في تاريخ ٢٨/٥/٢٠٠٩

<http://www.aecenar.com/institutes/megbi>

مركز القبيسي للدراسات والتنمية - راسنحاش - قضاء البترون - لبنان

A Member
Institute of



Qubaisi Center for Research and Development, Ras- Nhache, Batroun, Lebanon

Heidelberg/Germany – Ras Nhache/Lebanon

<http://www.aecenar.com/partners/lg-biotech>

دورات في الهندسة الوراثية و البيوانفورماتكس

Training Courses in Genetic Engineering and Bioinformatics

(Schedule for Lebanese Universities)

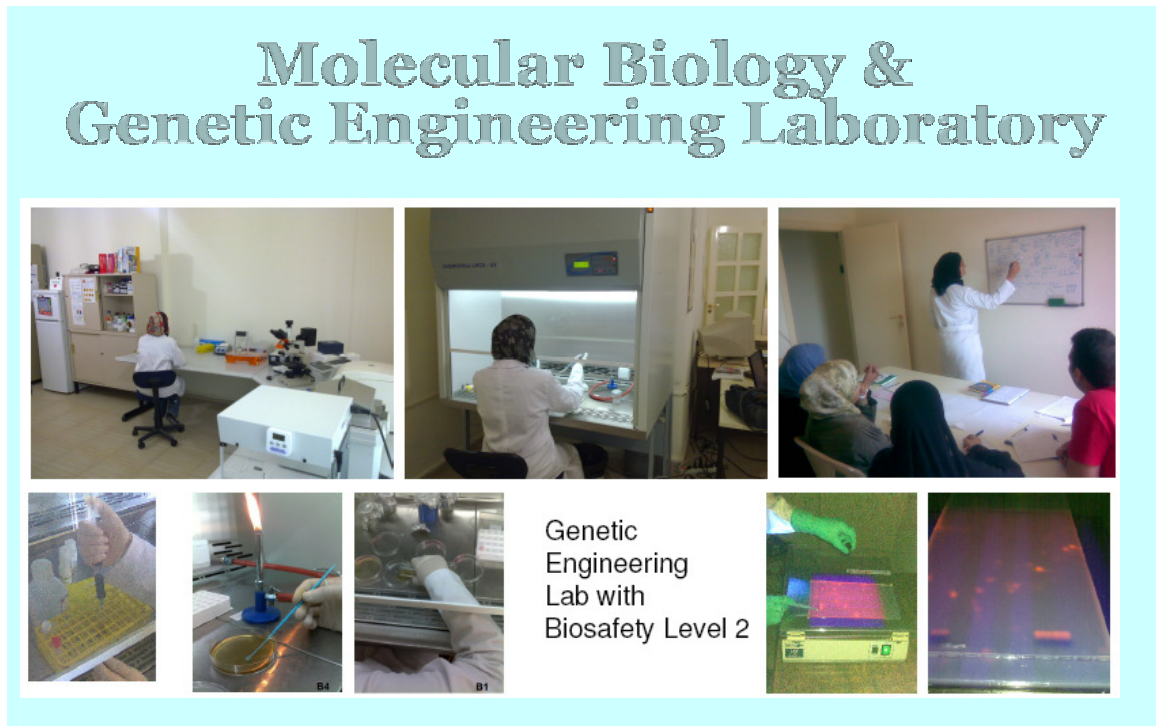
يسرنا الإعلان عن برنامج الدورات الفصلي للعام المقبل والذي سيبدأ من 3.2.2014 ويستمر لمدة تسعة أسابيع ينال فيها الطالب اربع ساعات في كل دورة أسبوعياً في اليوم الذي نحدده بالإتفاق مع جامعتة.

- تنتهي مدة التسجيل أسبوعين قبل الموعد المحدد لبدء الدورة.

Registration deadline is two weeks before starting of the training course.

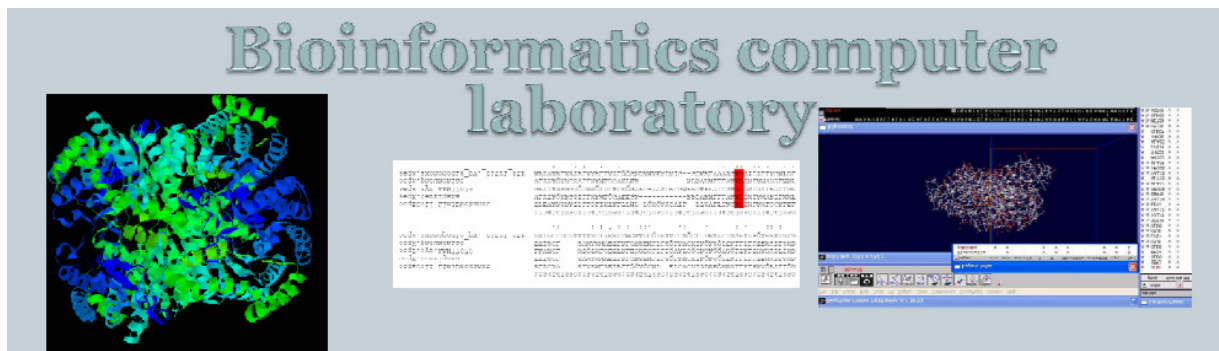
A. Training topics and outline

A.1 Molecular Cloning (basic techniques for working with DNA)



1 st day	8 – 12 or 14-18	Theoretical background of the training course and methods, Discussion of the workflow of the training course
2 nd day	8 – 12 or 14-18	Preparation of plates for bacteria (LB plates with ampicillin/IPTG/X-Gal, SOC medium)
3 rd day	8 – 12 or 14-18	DNA isolation, primer design for PCR
4 th day	8 – 12 or 14-18	PCR to isolate SRY gene
5 th day	8 – 12 or 14-18	Agarose gel to check the PCR and isolate the PCR product
6 th day	8 – 12 or 14-18	Ligation of SRY gene in pGEM-T, Transformation in E.coli and plating (overnight growth)
7 th day	8 – 12 or 14-18	Screening of E.coli colonies, inoculation of minipreps (overnight growth)
8 th day	8 – 12 or 14-18	Miniprep of the plasmid DNA (Isolation of recombinant plasmid from E.coli cells)
9 th day	8 – 12 or 14-18	Restriction digest and Agarose Gel, Discussion

A.2 Bioinformatics Laboratory (Practical Courses)



Part 1: Working with Life Science Databases

Outline (Short Description)

In this practical course each student gets a specific task to investigate a specific protein or gene. He/she has to search for information in the databases he/she had learned in the theoretical course “Life Science Databases and Analysis Tools”.

The information has to be gathered and presented in a 20 minutes speech.

Part 2: Working with Molecular Modelling Tools

Outline (Short Description)

In this course the molecular modelling tools VMD and BallView are considered in deep.

Content

- BallViewTutorial
- VMD Tutorial

Part 1	1 st day	Giving the tasks to groups of 2 students, beginning of database search in the Computer Lab.
	2 nd day	
	3 rd day	Continuing Database Search in the Computer Lab; Working out the results to a power point presentation.
	4 th day	
	5 th day	
Part 2	6 th day	working with the molecular modeling tools BALLVIEW and VMD (visualization of proteins etc.)
	7 th day	
	8 th day	
	9 th day	

B. رسوم الإشتراك في الدورات \ Fees:

- للطلاب الجامعي \ For undergraduate and graduate students:

Basic Techniques for working with DNA (36 hours): 360 \$

Bioinformatics (27 hours): 270 \$

- لطلاب الدكتوراه \ For doctoral students:

Basic Techniques for working with DNA (36 hours): 540 \$

Bioinformatics (27 hours): 400 \$

للمزيد من المعلومات:

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