



# AGRICULTURAL BIOTECHNOLOGY CENTRE (AgBC)

Faculty of Agriculture  
University of Peradeniya  
Peradeniya  
Sri Lanka

P-1535

Tele: 0094-81-2387180 Fax: 0094-81-2387180  
OUR REF: AgBC/Prog

E-mail: agbc@pdn.ac.lk

2015/02/05.....

Dean,

Fac. of Medicine

U. O. P.

Peradeniya.

E-NB  
+  
E-circular to  
all academic staff.  
See 9/2  
Please circulate

Dear Sir/ Madam,

## Certificate Course on Fundamentals of Molecular Biology and Biotechnology

Agriculture Biotechnology Centre will be conducting a lecture, discussion and project-based course (90 hours) that focus on the interactions between DNA, RNA, and proteins within cells and the most widely used molecular tools to analyze and modify genetic materials.

I would be grateful if you could circulate the attached notice and the brochure in your Faculty/ Department/ Institution/ Company.

Thanking you

Yours faithfully,

Dr. P. C. G. Bandaranayake

Director/AgBC

Agricultural Biotechnology Centre  
Faculty of Agriculture  
University of Peradeniya  
Peradeniya.  
Sri Lanka

Closing date of payments will be on

**04<sup>th</sup> March 2015**

Through cash or a cheque written in favor of,

Director,  
Agricultural Biotechnology Centre,  
Faculty of Agriculture,  
University of Peradeniya

Course fee:  
**Rs.20,000/= per participant**

Tele No : 081 2387180  
Fax No : 081 2387180  
Email : agbc@pdn.ac.lk

**AGRICULTURAL BIOTECHNOLOGY CENTRE  
FACULTY OF AGRICULTURE  
UNIVERSITY OF PERADENIYA**



***Certificate Course on  
Fundamentals of Molecular Biology  
and Biotechnology***

***From 12<sup>th</sup> March 2015***

Applications are called for the  
above Certificate Course organized by the  
Agricultural Biotechnology Centre,  
Faculty of Agriculture,  
University of Peradeniya



## Course contents (90 hours):

A taught course consisting of lectures, discussions and a project that focuses on the interactions between DNA, RNA and proteins, and the most widely used molecular biological tools. Topics covered in part one will include genetic mechanisms (DNA replication, repair, recombination, gene, genome organization, and gene expression), genomes, transcriptomes, proteomes, eukaryotic nuclear genomes, genomes of prokaryotes and eukaryotic organelles, virus genomes and mobile genetic elements. The part two will cover useful molecular biological techniques such as PCR, quantitative PCR, primer design, gel-electrophoresis, genotyping techniques, sequencing techniques, sequencing genomes and understanding sequence data, RNAseq, NCBI resources, molecular phylogenetics, gene cloning, microarrays, directed mutagenesis. In the third part, the participants will learn regulation of gene expression, manipulation of gene expression, gene silencing (RNAi and other), genetically modified organisms and experimental model systems.

**Venue:** Agricultural Biotechnology Centre,  
Faculty of Agriculture,  
University of Peradeniya

**Dates:** March: 12<sup>th</sup>, 13<sup>th</sup>, 20<sup>th</sup>, 27<sup>th</sup>  
April : 2<sup>nd</sup>, 10<sup>th</sup>, 17<sup>th</sup>, 24<sup>th</sup>, 30<sup>th</sup>  
May : 8<sup>th</sup>

**Time:** 8.30 a.m. – 5.00 p.m.

*\* Maximum 50 participants (First come, First serve)*

**Course Fee:** Rs. 20,000.00

**Coordinator:** Dr. P. C.G. Bandaranayake

**Application procedure:** Please complete the attached application form and submit with the full payment to:

Director,  
Agricultural Biotechnology Centre,  
Faculty of Agriculture,  
University of Peradeniya,  
Peradeniya.  
(Tel / Fax: 081-2387180)  
(e-mail: agbc@pdn.ac.lk)

"Your application form can be downloaded from: ([http://www.pdn.ac.lk/Notice board](http://www.pdn.ac.lk/Notice_board))"

The **deadline** for receipt of completed application forms is **04<sup>th</sup> March 2015**

## Certificate Course on Fundamentals of Molecular Biology and Biotechnology

### Application Form

Full Name: Mr./Ms./Dr/ Prof: .....

.....

.....

Designation: .....

Institute: .....

.....

.....

### **Contact Details:**

Mailing Address.....

.....

.....

.....

### **Telephone No:**

Office.....

Residence.....

Fax.....

Email.....

Signature of Participant: .....

Date: .....



# NOTICE



## ***Certificate Course on Fundamentals of Molecular Biology and Biotechnology***

**Are you interested in learning fundamentals of molecular biology and biotechnology? Then, this 90 hour taught course is for you!**

### **Course Content:**

A taught course consisting of lectures, discussions and a project that focuses on the interactions between DNA, RNA and proteins, and the most widely used molecularbiological tools. Topics covered in part one will include genetic mechanisms (DNA replication, repair, recombination, gene, genome organization, and gene expression), genomes, transcriptomes, proteomes, eukaryotic nuclear genomes, genomes of prokaryotes and eukaryotic organelles, virus genomes, and mobile genetic elements. The part two will cover useful molecular biological techniques such as PCR, quantitative PCR, primer design, gel-electrophoresis, genotyping techniques, sequencing techniques, sequencing genomes and understanding sequence data, RNAseq, NCBI resources, molecular phylogenetics, gene cloning, microarrays, and directed mutagenesis. In the third part, the participants will learn regulation of gene expression, manipulation of geneexpression, gene silencing (RNAi and other), genetically modified organisms, and experimental model systems.

- **Venue** : **Agricultural Biotechnology Centre, University of Peradeniya**
- **Date** : **10 days (March: 12<sup>th</sup>, 13<sup>th</sup>, 20<sup>th</sup>, 27<sup>th</sup>, April: 2<sup>nd</sup>, 10<sup>th</sup>, 17<sup>th</sup>, 24<sup>th</sup>, 30<sup>th</sup>, May: 8<sup>th</sup>)**  
Plus a12-15hr project (proposal, review or analysis), which will be evaluated
- **Time** : **8.30 a.m. – 5.00 p.m.**
- **Course Fee** : **Rs. 20,000.00 (non-refundable, food & lodging not included)**
- **Coordinator** : **Dr. Pradeepa C.G. Bandaranayake**
- **Application procedure:**

Please complete the attached application form and submit on or before 04<sup>th</sup> March 2015 with full payment to:

Director,  
Agricultural Biotechnology Centre (AgBC),  
Faculty of Agriculture, University of Peradeniya,  
Peradeniya  
Tel / Fax: 081-2387180  
E-mail: [agbc@pdn.ac.lk](mailto:agbc@pdn.ac.lk)

Application form can also be downloaded from the university web site notice board  
([http://www.pdn.ac.lk/uop/main/downloads\\_students.html](http://www.pdn.ac.lk/uop/main/downloads_students.html))

*\*Maximum capacity – 50 participants (First come, First serve!)*