### TENTATIVE PROGRAMME

### Day 1 (15 December 2008, 8.30 -5.30 pm)

- Registration and Opening ceremony
- Activation of Agro culture of RNAi GFP, TCV-CP, HcPro, P19, AV2 and PVX GFP
- Agroinfiltration of PVX GFP in *Nicotiana* benthamiana plants and rest on 16-C plants
- RNA isolation from 16-C and *Nicotiana* benthamiana plants
- Quantification of RNA
- Preparation of denaturing Formaldehyde gel and sample run
- Transfer of the gel on nylon membrane (over night)

### Day 2 (16 December 2008, 8.30-5.30 pm)

- Cross linking of Northern Blot
- siRNA isolation from total RNA
- Quantification of siRNA
- Preparation of acrylamide gel and siRNA sample running
- Preparation of probe by PCR for Northern blot using DIG PCR kit
- Transfer of siRNA from gel to membrane and cross linking
- Hybridization of Northern blot using GFP
  probe
- Observation of inoculated plants

### Day 3 (17 December 2008, 8.30-5.30 pm)

- Washing and Developing of Northern blot
- Preparation of oligo probe for siRNA/miRNA detection
- Hybridization of siRNA blot
- Observation of inoculated plants

### Day 4 (18 December 2008, 8.30-5.30 pm)

- Washing and development of siRNA/miRNA
   blot
- Observation of inoculated plants
- Ambion: The total solution for RNAi
- Closing ceremony

## INBIOSIS

Institute of Systems Biology Universiti Kebangsaan Malaysia 43600 UKM Bangi Selangor Darul Ehsan Tel: 03-89214549 Fax: 03-89213398

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THE RNA COMPANY

Exclusive Distributor for:



# Workshop: RNAi Technology and Application

15~18 December 2008 Centre for Gene Analysis and Technology Institute of Systems Biology Universiti Kebangsaan Malaysia Bangi, Selangor



### INTRODUCTION

RNAi has emerged as an important mainstream tool for both basic and applied research, and it has revolutionized the novel discipline known as functional genomics. RNAi is ubiquitous in eukaryotes and currently is the preferred tool for investigating the regulation of gene expression in plants, animals, and fungi. This method is becoming increasingly popular because of its wide-ranging applicability in research, which results from compatibility with cell culture and in vivo models. Comparatively speaking, RNAi is much faster and more economical than creating knock-out animals in order to study the function of specific genes. The resulting precision silencing of specific genes also makes RNAi an attractive platform for the discovery and development of life-saving pharmaceuticals. Realizing the important of this emerging technology, The Institute of Systems Biology (INBIOSIS), Universiti Kebangsaan Malaysia and National Institute of Biotechnology and Genetic Engineering, (NIBGE), Pakistan, will be organizing a training workshop on "RNAi Technology and Application", to be held at Center for Gene Analysis and Technology, INBIOSIS, UKM from 15 to 18 December 2008. This workshop will provide handson technical training for siRNA, experimental design, troubleshooting and measuring knockdown effects. Featured lectures will provide in depth discussion on the fundamentals of RNAi as well as cutting edge applications for drug discovery and target validation

The workshop is specially designed for post-graduate students, academicians and scientists who are working on the field of molecular biology/virology and functional genomics.



GUEST SPEAKER Dr. Shahid Mansoor Principle Researcher Head of Plant Biotechnology Unit, National Institute of Biotechnology and Genetic Engineering Faisalabad, Pakistan

### FACILITATORS

**Dr. Imran Amin Muhammad Amin**, Senior Scientist, Plant Biotechnology Unit, National Institute of Biotechnology and Genetic Engineering Faisalabad, Pakistan

### Assoc. Prof. Dr. Zamri Zainal

Coordinator, Center for Plant Biotechnology Institute of Systems Biology Universiti Kebangsaan Malaysia

#### DETAILS

Date : 15-18 December 2008 Venue : Centre for Gene Analysis and Technology Institute of Systems Biology (INBIOSIS) Universiti Kebangsaan Malaysia

\*As places are limited to 20 participants, early registration is recommended.

#### ACCOMODATION

Participants are advised to book their own accommodation. Accomodation nearby UKM campus are Puri Pujangga, UKM (tel :03-89213361/3362), Hotel Equatorial Bangi (tel: 03-82102222/89251111, website:www.equatorial.com/bng/)

### ENQUIRIES

For more information please contact: **Assoc. Prof. Dr. Ismanizan Hj Ismail** <u>maniz@ukm.my</u> 03-89215947

Assoc. Prof. Dr. Zamri Zainal zz@ukm.my 03-89215694

### REGISTRATION

Name	
Addr	ess
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Emai	1
	Attendance confirmation should be made before
	Institute of Systems Biology (INBIOSIS),
	Universiti Kebangsaan Malaysia, 🏾
	43600 UKM Bangi,
	Selangor Darul Ehsan or
	faxed to 03-89213398

Workshop fees: RM 1, 500.00

Registration fee covers workshop materials, tea and lunch must be paid in full prior to or on the day of registration.

### **METHOD of PAYMENT:**

- Check
- Money Order
- Postal Order

All payment made payable to "Bendahari Universiti Kebangsaan Malaysia"