

## New Technology Seminar



### Quantitative Real-Time PCR Genetic Variation Detection by High Resolution Melting Genotyping by Melting Curve Technology

Tuesday, June 12<sup>th</sup>, 2007

Center for Molecular Genetics Auditorium

Limited sitting please RSVP to [seth.meyers@roche.com](mailto:seth.meyers@roche.com) with seminar of interest

#### Seminar 1

11:00- 12:00 PM

Winston Patrick Kuo, D.D.S., M.S., D.M.Sc.: Harvard Medical School, Boston MA

#### "Confirming microarray data using the Universal Probe Library and quantitative Real-Time PCR"

Dr. Winston Kuo carries out research at the Department of Organismic and Evolutionary Biology at FAS in the research group of Dr. Arhat Abzhanov, in conjunction with the Decision Systems Group, and the Department of Developmental Biology, all at Harvard Medical School, Boston, MA. The talk will describe his recent large-scale cross-platform study and how the introduction of The ProbeLibrary™ has benefited his work. The ProbeLibrary™ consists of a set of hydrolysis probes that spans the majority of the transcriptome for various species ([www.universalprobelibrary.com](http://www.universalprobelibrary.com))

#### Seminar 2

12:00- 12:45 PM

Rebecca Berdeaux Ph.D.: The Salk Institute for Biological Studies, San Diego

#### "CREB promotes skeletal muscle survival via induction of a class II HDAC kinase"

Dr. Berdeaux will present her study regarding a mouse model of muscular dystrophy and determination of the underlying mechanism (Nat Med, 2007, 13(5): 597-603). Real-time PCR aspects of this study will be highlighted.

#### Seminar 3

1:00- 2:00 PM

Joe Salcedo MS. and Glenn Sawyer MS. Roche Applied Science

#### "Fast and cheap detection of known or unknown genetic variation using high resolution melting"

Probe less Detection of SNPs, DNA methylation, and other variants in less than 2 using saturating LC Green Dye.

#### Seminar 4

2:00- 3:00 PM

Paul Mola MS. Roche Applied Science

#### "Advancements in Real-Time PCR technology"

Seminar highlights: Cutting edge thermabase peltier technology for Real-Time PCR instrumentation will be discussed and how this enables rapid PCR and eliminates thermal well-to-well variability. The delta delta ct algorithm will be compared to the more accurate efficiency corrected relative quantification algorithm. In addition, polynomial fit standard curves will be introduced as well as the second derivative automated ct determination compared to the fit points method.

Offered by Roche Applied Science