



# Advanced qPCR Techniques for Publication Success: Following MIQE Recommendation

A joint workshop brought to you by Sigma and the EMBL

**Date: 11-15 July 2011**

**Location: EMBL Advanced Training Centre, Heidelberg, Germany**

## Introduction to MIQE

qPCR assay design

## Analyze Optimization Data

Effects of RNA, miRNA quality and inhibitors on RT-qPCR  
Standard RNA quality control assessments and quantification  
Checking RNA integrity (5', 3' assay)  
Assessing sample quality (SPUD)

## Reference Gene Selection and Normalization

Quantification strategies and efficiency determination  
Comparison of normalization approaches  
Using the normalization factor to assess sample quality

## Genomic Regulation of Gene Expression

qPCR gene expression experiments  
Applications: MMR scandal  
QC and data analysis

## Biostatistics

Data analysis expression study  
Interpretation of ZFN data