

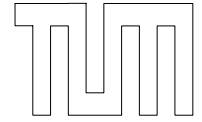
# qPCR 2007

26 – 30<sup>th</sup> March 2007

## Symposium & Exhibition & Workshop

3rd international qPCR Event, Technische Universität München,  
Freising-Weihenstephan, Germany

TECHNISCHE  
UNIVERSITÄT  
MÜNCHEN



### Scientific coordination:

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Stephen Bustin, School of Medicine, London, UK  
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Vladimir Benes, EMBL, Heidelberg, Germany  
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Gregory Shipley, University of Texas, Medical School, USA  
Heinrich H.D. Meyer, TUM, Weihenstephan, Germany

### Event organization:

Ulrich Wild, TUM-Tech GmbH Munich

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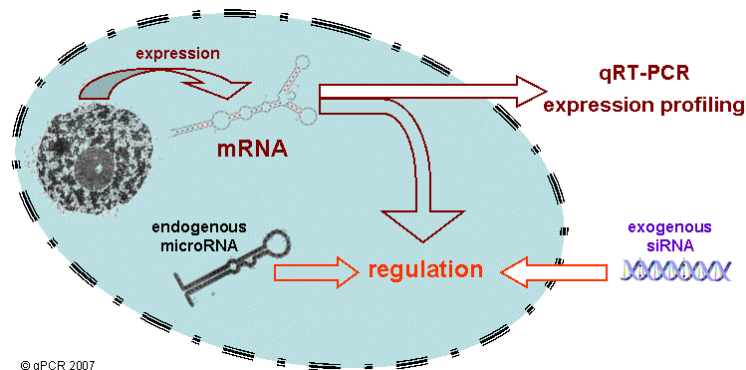
2<sup>nd</sup> March 2007

Dear colleagues,

The great international interest in the 1<sup>st</sup> and 2<sup>nd</sup> International qPCR Symposium & Application Workshops in 2004 and 2005 with more than 400 participants in each from over 40 countries, and 32 international companies in the qPCR Industrial Exhibition motivates repeating the success in spring 2007.

We have set the date for the **qPCR 2007 Event**, the 3<sup>rd</sup> International qPCR Symposium & Application Workshop to 26 – 30<sup>th</sup> March 2007. The event location is the central lecture hall complex and the foyer at TUM (Technical University of Munich) in Freising Weihenstephan, Germany. The TUM and the Biotech region around Munich is part of the largest Biotech cluster in Europe, located close to the Munich airport in the heart of Bavaria.

The focus of the qPCR 2007 Event will be on **single-cell qPCR, and microRNA/siRNA qRT-PCR applications.**



The qPCR 2007 Event is structured with three parts:

1. **qPCR Symposium** taking place March 26 – 28, including various **Talk and Poster sessions**
  2. a parallel **qPCR Industrial Exhibition** taking place March 26 – 28
  3. followed by three different **qPCR Application Workshops** taking place March 29 – 30
- Powered by the TATAA Biocenter Germany



The scientific organization is managed by international well-known scientists in the field of real-time PCR:

Stephen Bustin	Prof. of Molecular Science, School of Medicine, London, UK
Mikael Kubista	Prof. of Biotechnology, TATAA Biocenter, Sweden
Vladimir Benes	EMBL, Head of Genomics Core Facility, Heidelberg, Germany
Jo Vandesompele	Senior Scientist at the Center of Medical Genetics, University of Ghent, Belgium
Gregory Shipley	Prof. and Director of the Quantitative Genomics Laboratory at University of Texas Health Science Center, Houston, USA
Heinrich H.D. Meyer	Prof. of Physiology, Technical University of Munich, Weihenstephan, Germany
Michael W. Pfaffl	Reader in Physiology, Technical University of Munich, Weihenstephan, Germany (Scientific coordination of the Symposium and the Workshops)

The event organization will be managed by Dr. Ulrich Wild, TUM-Tech GmbH Munich [ulrich.wild@tumtech.de](mailto:ulrich.wild@tumtech.de)

Up to date information is available on the web page <http://qPCR2007.gene-quantification.info>

## qPCR Symposium

The symposium focus will be on 78 lectures and 107 poster presented by internationally recognised experts in their application fields. The emphasis will be on unbiased, didactic information exchange. One third of the talks will be presented by invited speakers, one third of the speakers will be selected from the submitted abstracts and one third will be qPCR company representatives. [Please find the confirmed talks below!](#)

Various poster sessions will be presented in parallel in separate poster exhibition halls. All scientific contributions will be published in the qPCR 2007 Symposium Proceedings: **ISBN-13: 978-3-00-020385-5**

Please register here => **CONFTOOL** => <https://www.wzw.tum.de/conftool/>

## qPCR 2007 - Talk and Poster sessions:

### Main session: **Single-cell qPCR**

all around single-cell qPCR, pre-amplification techniques, laser micro dissection, sub-cellular PCR, micro-manipulation of cell clusters, cellular micro injection, .....

### Main session: **microRNA – siRNA Applications**

microRNA extraction, qRT-PCR technologies to detect microRNA, siRNA applications in combination with real-time RT-PCR, microRNA targets and microRNA precursors, new siRNA manipulation and microRNA technologies, .....

### **Immuno qPCR**

development, establishment, optimization of Immuno-qPCR, innovative Immuno qPCR applications, .....

### **New diagnostic applications with real-time PCR**

new quantification methods, new dyes and probe technologies, SNP analysis, high resolution melt applications, Marker Genes (diagnostic, prognostic and therapeutic markers on DNA and RNA level), .....

### **New high throughput quantitative PCR**

96 well and 384 well applications, new high throughput platforms, SNP application, gene expression real-time RT-PCR arrays, quantitative multiplexing, .....

### **Pre-analytical Steps**

sampling technologies, DNA / RNA purification, DNA / RNA quality control, Reverse Transcription, RT quality control, external references, .....

### **qPCR NOS Session** - Normalization & Optimization & Standardization

new types of normalization, one vs. multiple reference genes, genomic DNA as standard, external standards, optimization of the real-time PCR, inhibition of negative effects, optimization of real-time PCR efficiency, multiplexing, establishment of DNA / RNA standards, inter-run standards, national and international studies on qPCR standardization, new quantification strategies, .....

### **qPCR BioStatistics & Bioinformatics**

software applications, calculation of relative expression, data mining, primer and probe design, real-time PCR efficiency determination, CP determination from amplification response curves by mathematical modelling, raw data analysis, statistics in real-time PCR, data management, 3D data visualization, .....

## Confirmed Talks

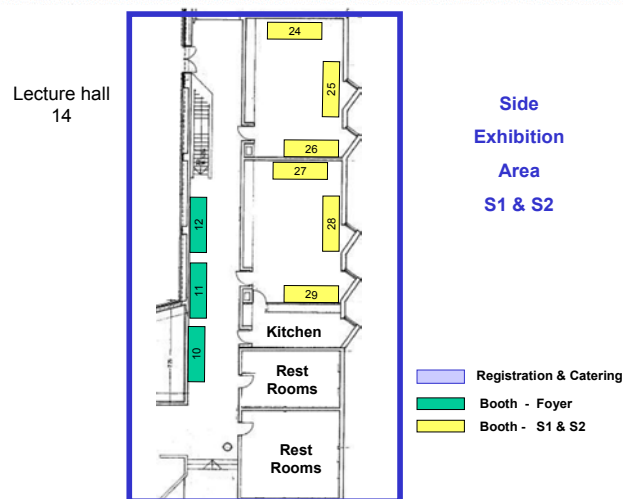
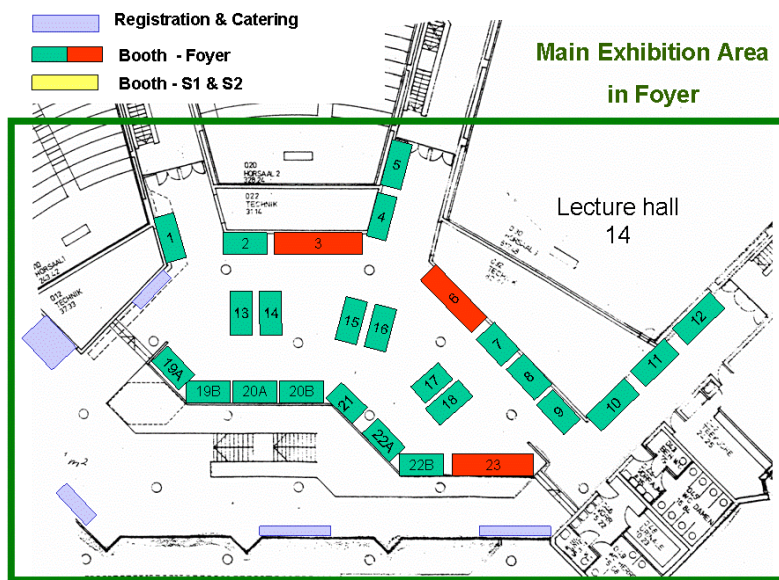
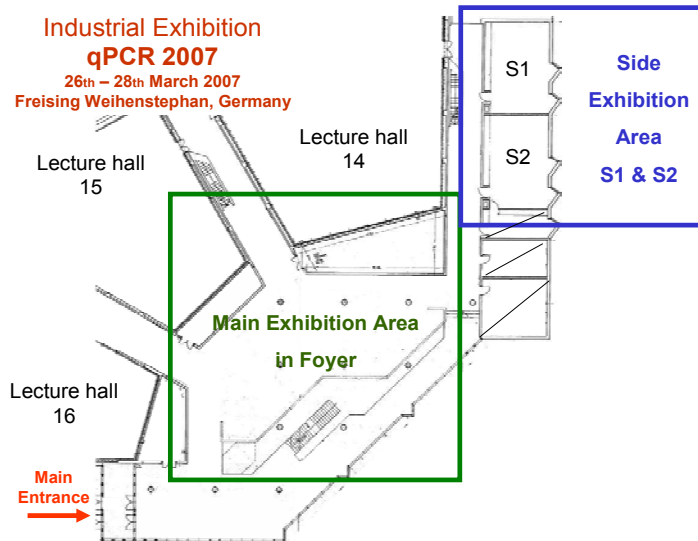
<b>Keynote Lecture:</b> <b>"Pioneer in qPCR"</b>	<b>Thomas W. Myers</b> Director, Program in Core Research, Roche Molecular Systems, US	Advances in Quantitative PCR for Research and Diagnostic Applications.
	<b>invited academic speaker</b>	<b>preliminary title</b>
<b>Main session:</b> <b>single-cell RT-qPCR</b>	<b>Birgit Liss</b> Molecular Neurobiology, Department of Physiology & Pathophysiology, Medical Faculty, Philipps University Marburg, Germany	Quantitative RT-qPCR of individual dopaminergic neurons from vital and fixed tissues.
	<b>Anders Stahlberg</b> Stem Cell Center Lund University, Lund, Sweden	Detection and quantification of mRNAs in single human embryonic stem cells.
	<b>Sanjay Tyagi</b> Public Health Research Institute (PHRI) at the International Center for Public Health (ICPH), Newark, NJ, US	Large Scale Cell-to-cell Variations in Gene Expression.

	<b>Benedita Rocha</b> INSERM U345, Institut Necker, Paris, France	Quantification of multiple genes expression in single cells.
	<b>Salvatore Pece</b> IEO (Istituto Europeo di Oncologia) Milano Italy	Molecular portraiting of normal and tumor human breast stem cells. <a href="#">sponsored by:</a> Applied Biosystems, Applera Deutschland GmbH, Darmstadt, Germany
	<b>Martin Bengtsson</b> Department of Experimental Medical Science, Lund University, Lund, Sweden	Quantitative PCR of heterogeneous tissue: Lessons from the islets of Langerhans.
	<b>Radek Sindelka</b> Institute of Molecular Genetics, Prague, Czech Republic	Intracellular expression profiles in the <i>Xenopus laevis</i> oocytes revealed by quantitative real-time PCR.
	<b>Wolfgang Mann</b> Vize President, Head of Molecular Biology Advalytix AG, Brunntahl, Germany	Systematic genetic analysis of single cells by PCR.
	<b>Dirk Kemming</b> Institute of Tumor Biology, Center of Experimental Medicine, University Medical Center Hamburg Eppendorf, Germany	Quantitative real time PCR for single tumor cell based diagnostics. <a href="#">sponsored by:</a> Eppendorf AG, Hamburg, Germany
<b>Main session: microRNA / siRNA</b>	<b>Gunter Meister</b> Arbeitsgruppe RNA Biologie, Max Planck Institut für Biochemie, Martinsried, Germany	Functional analysis of microRNA-containing protein complexes in human cells.
	<b>Leendert H. J. Looijenga</b> Professor in Translational Patho-Oncology, Department of Pathology, Erasmus MC-University Medical Center Rotterdam, Rotterdam, The Netherlands	(micro)RNAome of human germ cell tumors: pathological and clinical implications <a href="#">sponsored by:</a> Applied Biosystems, Applera Deutschland GmbH, Darmstadt, Germany
	<b>Vladimir Benes</b> Head of Genomics Core Facility, EMBL, Heidelberg, Germany	MicroRNA profiling toolbox: points to consider.
	<b>Greg Shipley</b> Director, Quantitative Genomics Core Laboratory, The University of Texas Health Science Centre- Houston, TX, US	Validation of Hits from an siRNA Library Screen Using Real-Time qPCR.
<b>New diagnostic applications with real-time PCR</b>	<b>Stephen A Bustin</b> Professor of Molecular Science, Institute of Cell and Molecular Science, Queen Mary's School of Medicine and Dentistry, University of London, UK	Analysis of expression signatures associated with microvascular invasion in colorectal cancer.
	<b>Udo Reischl</b> Institut für Medizinische Mikrobiologie und Hygiene - Universität Regensburg, Germany	Real-time PCR in Diagnostic Microbiology - a review on 9 years of R&D in an academic environment.
	<b>Claudio Orlando</b> Clinical Biochemistry Unit, Department of Clinical Physiopathology, University of Florence, Italy	Quantitative DNA Methylation Analysis.
	<b>Jim Huggett</b> Centre for Infectious Diseases & International Health, University College London, UK	qPCR analysis of molecular targets for developing world pathogen diagnosis; a multi-step approach to a multi-step problem.
	<b>Helen White</b> National Genetics Reference Laboratory, Wessex Regional Genetics, Salisbury District Hospital Odstock, Salisbury, Wiltshire, UK	Applications of High Resolution Melt Analysis for Genetic Diagnostics.
<b>Immuno-qPCR</b>	<b>Christof Niemeyer</b> Universität Dortmund, FB Chemie, Biologisch Chemische Mikrostrukturtechnik Dortmund, Germany	Immuno-qPCR: Novel Opportunities in Clinical Diagnostics and Research.
	<b>Ruelle Virginie</b> Université de Liège, Centre de Recherche sur les Proteines Prions, Liège, Belgium	Immuno-Real Time-PCR as a sensitive diagnostic tool: case of prion proteins.
	<b>Kristina Lind</b> Department of Chemistry and Biosciences Chalmers University of Technology, Göteborg, Sweden	Use of immuno-qPCR for quantifying proteins in large-scale TAP-tag collections.
	<b>Pamela Pinzani</b> Clinical Biochemistry Unit Department of Clinical Physiopathology University of Florence, Florence, Italy	Simultaneous measurements of mRNA expression and the corresponding protein level in micro dissected tissue samples by real-time technology: PSA in normal and tumour tissues as a demonstrative model.

<b>Biostatistics Bioinformatics</b>	<b>Michael W. Pfaffl</b> Reader in Physiology, Center of Life Science, Weihenstephan, TUM, Freising, Germany	Review: 10 years of qPCR Data analysis, Biostatistics and Bioinformatics. Recent advances and new perspectives.
	<b>Jan Hellemans</b> Center for Medical Genetics Ghent Ghent University Hospital, Ghent, Belgium	Advanced and universally applicable models for relative quantification with flexible inter-run calibration and proper error propagation.
	<b>Tzachi Bar</b> LabonNet Ltd., Kinarot - Jordan Valley Technological Incubator, Zemach, Jordan Valley, Israel	Multivariate kinetic outlier detection.
	<b>Mikael Kubista</b> Professor of Biotechnology, MultiD Analyses AB, Göteborg, Sweden	Real-time PCR expression profiling.
<b>High Throughput qPCR Expression profiling</b>	<b>Colin Brenan</b> Chief Technology Officer, BioTrove Inc., Woburn, MA, US	Massively Parallel, Nanoliter-scale PCR for High Throughput Genomics.
	<b>Jo Vandesompele</b> Center for Medical Genetics Ghent Ghent University Hospital, Ghent, Belgium	It's a long road to prognostic qPCR profiling in the clinic.
	<b>Luigi Warren</b> Department of Bioengineering, Stanford University, Stanford, CA, US	Towards High-Throughput Single-Cell Expression Analysis.
	<b>industrial R&amp;D speaker</b>	<b>preliminary title</b>
<b>siRNA</b>	<b>Eli Hefner</b> Bio-Rad Laboratories, Hercules, CA, US	Beta-actin gene silencing vis siRNA and its effects on protein profiles
<b>High Throughput qPCR</b>	<b>Thorsten Träger</b> Senior Scientist R&D, Qiagen GmbH, Hilden, Germany	Speed matters: Fast ways from template to results.
<b>qPCR NOS session</b>	<b>Evan Messenger</b> R&D, Scientist, Biosearch Technologies, Novato, CA, US	The intricacies of multiplexing revealed through a pathogen detection assay.
<b>High throughput qPCR</b>	<b>Oliver Geulen</b> R & D, Roche Applied Science, Mannheim, Germany	LightCycler 480 Real-Time PCR System: Innovative Solutions for high throughput PCR.
<b>single-cell qPCR</b>	<b>Keith Stanley</b> Centre for Immunology, St Vincents Hospital Darlinghurst NSW, Corbett Life Science, Sydney, Australia	Gene expression profiling from picograms of RNA by Multiplexed Tandem PCR.
<b>qPCR NOS session</b>	<b>Douglas Storts</b> Promega Corporation, Woods Hollow Road, Madison, WI, US	Quantitative, multiplexed amplification with the Plexor qPCR and qRT-PCR Systems.
<b>New diagnostic applications with real- time PCR</b>	<b>David H. Persing</b> Executive Vice President, Chief Medical and Technology Officer, Cepheid, Sunnyvale, CA, USA	Democratizing Diagnostics: On-demand detection of Drug Resistant Microbes on the GeneXpert.
<b>qPCR NOS session</b>	<b>Clemence Beslin</b> Product Manager qPCR, Eurogentec, Liege Science Park, Seraing, Belgium	Primer and probe design and synthesis Fluorophore - quencher combinations.
<b>High Throughput qPCR</b>	<b>Marc Unger</b> R&D, Senior Scientist, Fluidigm, 7100 Shoreline Court, South San Francisco, CA, US	BioMark System: A Breakthrough Real-time qPCR System for HT Expression Profiling, MicroRNA Analysis, and Single-Cell qPCR.
<b>microRNA / siRNA</b>	<b>Mark Landers</b> Invitrogen Corporation, Faraday Avenue, Carlsbad, CA, US	Characterization of miRNA expression in hESC lines using NCode SYBR GreenER miRNA qRT-PCR.
<b>qPCR NOS session</b>	<b>Tania Nolan</b> European Business Development Manager, Sigma-Genosys, Homefield Road, Haverhill, UK	Quantification of mRNA using Real Time RT-PCR.
<b>siRNA</b>	<b>Martin Greiner</b> Product Manager 2100 Bioanalyzer, Agilent Technologies Inc, Stevens Creek Blvd, Santa Clara, CA, US	A new method for separation and characterization of Small RNA by On-Chip Electrophoresis.
<b>High Throughput qPCR</b>	<b>Manfred Souquet</b> Application Specialist Genome Lab, Beckman Coulter GmbH, Krefeld, Germany	GeXP - a new approach in high-throughput gene expression analysis.
<b>New diagnostic applications with real- time PCR</b>	<b>Martin Alan Lee</b> Enigma Diagnostics Limited, Building 224, Tetricus Science Park, Salisbury, UK	Fluorogenic Quantitative PCR for Non-laboratory Applications.

## Industrial Exhibition

An industrial exhibition will be held during the qPCR Symposium March 26 – 28 in the foyer of the central lecture hall complex (green frame) and in two side rooms S1 and S2 (blue frame). Already more than **35 companies** agreed to participate at the qPCR Event Exhibition from 26<sup>th</sup> – 28<sup>th</sup> March 2007.





**Further participating companies at the Industrial Exhibition:**



**Supporting publishers, web and workshop partners:**



## qPCR Workshops

Three different 2-day workshops will be held in parallel March 29 - 30 by the TATAA Biocenter Germany ([www.TATAA.com](http://www.TATAA.com) and <http://TATAA.gene-quantification.info> ). The TATAA qPCR workshop laboratories and seminar rooms are close to the central lecture hall.



### Workshop topics:

- Classical qPCR Application (fully booked)  
⇒ download flyer: [http://www.wzw.tum.de/gene-quantification/qpcr2007/Schedule\\_TATAA\\_Core\\_Module\\_qPCR2007.pdf](http://www.wzw.tum.de/gene-quantification/qpcr2007/Schedule_TATAA_Core_Module_qPCR2007.pdf)
- qPCR Biostatistics  
⇒ download flyer: [http://www.wzw.tum.de/gene-quantification/qpcr2007/Schedule\\_TATAA\\_Biostat\\_Module\\_qPCR2007.pdf](http://www.wzw.tum.de/gene-quantification/qpcr2007/Schedule_TATAA_Biostat_Module_qPCR2007.pdf)
- Sample Preparation and Immuno-qPCR (fully booked)  
⇒ download flyer: [http://www.wzw.tum.de/gene-quantification/qpcr2007/Schedule\\_TATAA\\_SamplePrep\\_Immuno\\_Module\\_qPCR2007.pdf](http://www.wzw.tum.de/gene-quantification/qpcr2007/Schedule_TATAA_SamplePrep_Immuno_Module_qPCR2007.pdf)

All workshops offer extensive hands-on training by qPCR experts from TATAA Biocenter. Leading probe technologies will be demonstrated, common and emerging instrument platforms will be available and advanced primer and probe design programs will be used. Hands-on training will be provided on quantitative gene expression, including design and optimization of both RT and qPCR protocols.

Participating companies are asked to support the workshops with PCR cyclers, qPCR kits, consumables, centrifuges, pipettes etc..... Please contact Michael Pfaffl at the TATAA Biocenter Germany [Michael.Pfaffl@tataa.com](mailto:Michael.Pfaffl@tataa.com) for information and details.

## Symposium and Workshop Fees

The registration fees include:

- Printed proceedings showing all the scientific contributions: **ISBN-13: 978-3-00-020385-5**
- Online access: with permission from the authors all presentation slides and posters will be available online on the symposium homepage, in a password protected area.
- Full catering service includes ALL kind of drinks, various snacks over the day, lunch meals during the day and two evening events a Get-Together-Party on Monday March 26, and a downtown Evening-Event on Tuesday March 27, in Freising with a very delicious international buffet.

Symposium ( 3 days )	fees include 19% VAT
students*	380 Euro
academic attendants	480 Euro
industrial attendants	580 Euro
<b>Workshop ( 2 days )</b>	
students*	380 Euro
academic attendants	480 Euro
industrial attendants	580 Euro
<b>Symposium + Workshop ( 5 days )</b>	
students*	700 Euro
academic attendants	900 Euro
industrial attendants	1100 Euro
*The students should present a valid student passport at the registration.	

An online Registration and Abstract-submission tool => CONFTOOL => <https://www.wzw.tum.de/conftool/>

If you have further questions, we are pleased to help you. Up to date information is available on the Symposium Homepage <http://qPCR2007.gene-quantification.info>

Hope to meet you in March at the qPCR 2007 Event in Freising!

Scientific coordinator