

## **10. Appendix**

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## 10.1 Acknowledgement

This dissertation represents the efforts of about three years of work, and would not have been possible to be finished without the effective cooperation and great assistance of so many people who deserve my acknowledgement.

I would like to express my highest gratitude to Professor Dr. Hans Lehrach for his providing me the opportunity to carry out my Ph.D. program in his department at the Max-Planck-Institute for Molecular Genetics, for the guidance and for reviewing this thesis. I am indebted to Professor Dr. Gerd Multhaup for being my adviser in Free University Berlin and for reviewing this thesis.

I am exceptionally grateful to my group leader, Dr. Michal Janitz, for inviting me to be here, for all his supervision, discussion and supports on my Ph.D. program during the last four years, for his correction of this dissertation, for his additional help with my family, as well as for his advice on my career development which is of vital importance for my future.

A special thank-you goes to Dr. Anna Guerasimova and Dr. Lajos Nyarsik for their stimulating discussions and valuable suggestions, which helped me with understanding the technical details, and for giving critical comments on my thesis.

Biotechnology engineer Regine Schwartz from the group of Dr. Nyarsik deserves my thanks for her professional spotting skills, technical assistance and experimental work, and for her warm help to find the comfortable apartment for my family and the excellent babysitter for my little son.

Thanks are also due to Sabine Thamm for her daily support and warmth on my numerous requests for German translation during my staying in the lab, to Dr. Andrea Fiebitz for her kindly translating the summary from English into German and for a lot of very generous help, to Andreas Dahl for his encouraging smile, sparkling discussion and strong support for my private life, to Irina Girnus for her assistance during the RNA preparation step.

Particular thanks go to Dr. Ralf Herwig and Mario Drungowski for their bioinformatic discussion and help during the paper preparation.

I am indebted to my colleagues, Dr. Dominique Vanhecke, Dr. Yuhui Hu, Xi Cheng, Matthias Lange and some other members for their creating a pleasant working atmosphere throughout my project, for their technical supports, valuable discussion on projects, for their reagent supply and for their allowing me to use their advanced computers.

Also I would like to thank Hilke Wegwerth, Jeanette Brylla, Johanna Belart, Ulrich Barenbrock, and Anna Skotarczyk for their administrative helps on my life here in Germany as a foreigner.

Finally, I want to express my deep appreciation to my families: my parents have been providing me with their continuous support over all these years which enable me to get this far; my wife Chang Yin, with her love and care, has made my life in the lab full of joy and interests as at home; my son Yuchong Liu, with his admiring smile as well as the bothering cry during the two-year period of growing up, clears up and fuels my mind every time when I stay with him.

Sequence-verified DNA clones were kindly provided by the RZPD Deutsches Ressourcenzentrum für Genomforschung, Germany. This work was supported by the European Commission project MolTools, the National Genome Research Network (NGFN-2) and the Max-Planck-Society.

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## 10.4 Abbreviations

A	adenine
AUG	the Area Under the ROC Curve
BLAST	basic local alignment search tool
BODIPY	4,4-difluoro-5,7-dimethyl-4-bora-3,4-diaza-s-indacene propionic acid
bp	base pairs
C	cytosine
°C	degree Celsius
CCD	charge-coupled device
cDNA	complementary DNA
cm	centimeter
CV	coefficients of variation
Cy5	cyanine 5
dATP	2'-deoxyadenosine 5'-triphosphate
dCTP	2'-deoxycytidine 5'-triphosphate
ddNTP	dideoxynucleoside triphosphate
DEPC	diethyl pyrocarbonate
dGTP	2'-deoxyguanosine 5'-triphosphate
DNA	deoxyribonucleic acid
dNTPs	deoxy-Nucleotide TriPhosphates
dsDNA	double-stranded DNA
dTTP	2'-deoxythymidine 5'-triphosphate
EB	ethidium bromide
EDTA	ethylenediamine tetraacetic acid
EST	expressed sequence tag
FAM	5-carboxyfluorescein;
FISH	fluorescence resonance energy transfer
fmol	femtomol
FN	false negative
FP	false positive

FRET	fluorescent in situ hybridisation
G	guanine
h	hour
HNA	1', 5'- anhydrohexitol nucleic acid
HTS	high-throughput screening
iFRET	induced fluorescence resonance energy transfer
kb	kilo base pairs
LNA	locked nucleic acid
M	mol
min	minute
mJ	micro joule
ml	milliliter
mm	millimeter
mM	millimoles per liter
MPIMG	Max-Planck-Institute for Molecular Genetics
mRNA	messenger RNA
MTP	microtiter plate
µg	microgram
µl	microliter
µm	micrometer
µM	micromoles per liter
µTAS	micro total analysis system
NCBI	National Center of Biotechnology Information
nl	nano-liter
nM	nanomoles per liter
nm	nanometer
nt	nucleotide
OD	optical density
OFP	oligonucleotide fingerprinting
OP	oligoprobe
PCR	polymerase chain reaction



pl	picoliter
pmol	picomolar
PNA	peptide nucleic acid
RNA	ribonucleic acid
ROC	Receiver operating characteristic
ROX	6-carboxy-Xrhodamine;
rRNA	Ribosomal Ribonucleic Acid
RT-PCR	Reverse Transcription – Polymerase Chain Reaction
RZPD	Deutsches Ressourcenzentrum für Genomforschung
S	phosphorothioation
SBH	sequencing by hybridization
SDS	sodium dodecylsulfate
sec	second
SNP	single-nucleotide polymorphism
SSC	sodium chloride and sodium citrate
T	thymine
TAE	Tris-acetate EDTA
TEA	triethylamine
TEACl	tetraethylammonium chloride
T <sub>m</sub>	melting temperature
TN	true negative
TP	true positive
U	units
UV	ultraviolet
V	Voltage
vs	versus
v/v	volume per volume
w/v	weight per volume

## **10.5 Curriculum Vitae**

Not available here.

## 10.6 Publications related to this work

### 10.6.1 Articles

1. **Jian-Ping Liu**<sup>#</sup>, Mario Drungowski<sup>#</sup>, Lajos Nyársik, Regine Schwartz, Hans Lehrach, Ralf Herwig, Michal Janitz (<sup>#</sup>, shared first-author). Oligonucleotide fingerprinting of arrayed cDNA sequences using LNA-modified hybridization probes. *Combinatorial Chemistry & High-Throughput Screening*, 2007, 10(4), 269-276.
2. **Jian-Ping Liu**, Anna Guerasimova, Lajos Nyarsik, Regine Schwartz, Matthias Lange, Hans Lehrach and Michal Janitz. LNA-containing oligodeoxynucleotide hybridization with printed cDNA microarrays on nanoporous membrane slides. *Combinatorial Chemistry & High-Throughput Screening*, 2006, 9(8), 591-597.
3. Anna Guerasimova, Lajos Nyarsik, **Jian-Ping Liu**, Regine Schwartz, Matthias Lange, Hans Lehrach and Michal Janitz. Liquid-based hybridization assay with real-time detection in miniaturized array platforms. *Biomolecular Engineering*, 2006, 23(1), 35-40.

### 10.6.2 Poster Presentations

1. September 18-21, 2005, Berlin, Germany  
GBM2005 Annual Fall Meeting, Gesellschaft für Biochemie und Molekularbiologie
2. April 4-7, 2004, Berlin, Germany  
HUGO2004 conference, The Human Genome Organization