

## ICMR INSERM Workshop

### “Development of Biomarkers for CVD and Diabetes”

January 22nd, 23rd, 24<sup>th</sup> 2007

Venue: Wet & Wild Resort, 45 -Milestone, Village Naurangpur, Gurgaon

### Agenda

| 22nd January (DAY 1)   |   |
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| 8:30 - 9:30 am   | Registration  |
| Introduction and Welcome to the Workshop   |   |
| 9:30 - 9:35 am<br>9:35 - 9:45 am   | Bela SHAH<br>Lalit KANT   |
| 9:45 – 10:15 am  | Keynote Address: NK GANGULY, Director General, ICMR   |
| 10:15 - 10:45 am   | Keynote Address: Florent SOUBRIER, INSERM   |
| 10:45-11:00 am   | Introduction of Participants  |
| 11:00-11:30  | Tea   |
| 11:30- 1:30 pm   | Session I: Linking Obesity to Development of Heart Diseases and Diabetes  |
| <p><b>Chairpersons -</b><br/> <b>F. CAMBIEN(France),</b><br/> <b>NK GANGULY, Bela SHAH (India)</b></p> <p><b>Rapporteur</b><br/> <b>Prashant MATHUR, Tanvir KAUR</b></p> | <p><b>Beverley BALKAU</b>- Obesity, central adiposity: epidemiological studies on their roles in diabetes and cardiovascular diseases</p> <p><b>Karine CLEMENT</b> – Human Obesity: From genetics to transcriptomic approaches</p> <p><b>I JUHAN-VAGUE</b> – Visceral obesity and haemostatic abnormalities</p> <p><b>Anoop MISHRA</b> – Cardio-metabolic-inflammatory risk in Asian Indians: Focus on young individuals</p> <p><b>Jacqueline CAPEAU</b> – Diseases of adipose tissue: genetic and pathophysiology of human lipodystrophies</p> |
| 1:30 - 2:15 pm   | Lunch   |
| 2:15 – 3:30 pm   | Session II: Inflammatory Responses as a Marker for Development of CVD and Diabetes  |
| <p><b>Chairpersons</b><br/> <b>Jacqueline CAPEAU (France)</b><br/> <b>CC KARTHA (India)</b></p> <p><b>Rapporteur</b><br/> <b>Tanvir KAUR, DK SHUKLA</b></p>              | <p><b>NK MEHRA</b>- Immunogenetic biomarkers for Type 1 Diabetes in the North Indian Population</p> <p><b>Alain TEDGUI</b> - Novel biomarkers of cardiovascular risk</p> <p><b>Sophie CAILLAT-ZUCMAN</b> – A role for the NKG2D pathway in type 1 diabetes</p>  |

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| 3:30 -3:45pm   | Tea  |
| 3:45 -5:30 pm<br><b>Chairpersons</b><br><b>Alain TEDGUI (France)</b><br><b>Bela SHAH, NK MEHRA, (India)</b><br><br><b>Rapporteur</b><br><b>Meenakshi SHARMA, Uma KANGA</b>                         | <b>Roundtable : Reality Check 2007</b><br><b>Lead Discussants – Krishan KUMAR, Shiva KUMAR, Q PASHA</b><br><br><b>Discussions will focus on:</b><br>1. Challenges posed in development of Biomarkers<br>2. Challenges in introduction of novel biomarker testing in clinical practice                                  |
| 7:00 pm  | Dinner   |
| <b>23rd January (DAY 2)</b>  |  |
| 9:30 – 10:45 am<br><br><b>Chairpersons</b><br><b>I JUHAN VAGUE (France)</b><br><b>S MAJUMDAR (Indian)</b><br><br><b>Rapporteur</b><br><b>R Lakshmy, Ravinder SINGH</b>                             | <b>Session III: Linking Genes to Diabetes and Cardiovascular Diseases</b><br><br><b>François CAMBIEN</b> - Genomic epidemiology, a new research challenge<br><b>Françoise DIGNAT-GEORGE</b> – Circulating endothelial cells and microparticles as biomarkers of endothelial dysfunction in cardiovascular disorders    |
| 10: 45 – 11:15 am  | Tea  |
| 11:15 - 1:00 pm<br><b>Chairpersons</b><br><b>I JUHAN VAGUE (France)</b><br><b>S MAJUMDAR (Indian)</b><br><br><b>Rapporteur</b><br><b>R Lakshmy, Ravinder SINGH</b>                                 | <b>V MOHAN</b> - Genetics Of Type 2 Diabetes In India – ‘The Asian Indian Phenotype / Genotype’<br><b>Partha P MAJUMDAR</b> – Search for genomic markers in cardiovascular diseases: Prospects and problems<br><b>Pascal FERRE</b> – Insulin and gene regulation<br><b>MA Qadir PASHA</b> – Biomarkers in hypertension |
| 1:00 – 2:00 pm   | Lunch  |
| 2:00 – 3:00 pm<br><b>Chairpersons</b><br><b>Pascal FERRE (France)</b><br><b>HPS SACHDEV (Indian)</b><br><br><b>Rapporteur</b><br><b>Veena DHAWAN, Geetha MENON</b>                                 | <b>Session IV: Predicting and Monitoring Diabetes</b><br><br><b>CC KARTHA</b> - Monocyte proteomics – A key to understand the increased risk of atherosclerosis in type II diabetes?<br><b>Claire LEVY-MARCHAL</b> – Fetal origins of insulin resistance and the metabolic syndrome                                    |
| 3:00 – 4:00 pm<br><b>Chairpersons</b><br><b>Claire LEVY-MARCHALL (France)</b><br><b>Partha MAJUMDAR, Meenakshi SHARMA (Indian)</b><br><br><b>Rapporteur</b><br><b>Ravinder SINGH, Geetha MENON</b> | <b>Working Group : Identification of Disease Risk: Genetic/ Genomic Approaches</b>   |
| 4:00 - 4 :15 pm  | Tea  |

## 24th January (DAY 3)

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| <p><b>9:30 – 10:30 am</b><br/> <b>Chairpersons</b><br/> <b>Françoise DIGNAT GEORGE</b><br/> <b>(France), Anoop MISHRA, Q</b><br/> <b>PASHA (Indian)</b></p> <p><b>Rapporteur</b><br/> <b>Geetha MENON</b><br/> <b>Meenakshi SHARMA</b></p> | <p><b>Roundtable: Critical Paths to Biomarker Development</b><br/> <b>Lead Discussants – UTTAM PATI, CC KARTHA, D</b><br/> <b>PRABHAKARAN</b></p> <p><b>Discussions will focus on:</b></p> <ol style="list-style-type: none"> <li>1. Biomedical Discoveries Needing Evaluation</li> <li>2. Identifying Priorities – Opportunity List*</li> <li>3. Identifying Areas for Indo France Collaboration</li> </ol> <p><b>*Opportunity List should spur a continued dialogue between Indo France researchers, industry and government organizations</b></p> |
| <p><b>10:30 – 11:00 am</b></p>   | <p><b>Tea</b></p>  |
| <p><b>11:00 – 12:30 pm</b><br/> <b>Chairpersons</b><br/> <b>Karine CLEMENT(France),</b><br/> <b>D PRABHAKARAN, HPS SACHDEV</b><br/> <b>(Indian)</b></p> <p><b>Rapporteur</b><br/> <b>Tanvir KAUR, Veena DHAWAN</b></p>                     | <p><b>Session V: Diabetes and Cardiovascular Diseases</b></p> <p><b>KK TALWAR-</b> Biomarkers for Acute MI<br/> <b>Nikhil TANDON -</b> Biomarkers of CVD risk in Diabetics - A Clinician's Perspective<br/> <b>D PRABHAKARAN -</b> Genes and Coronary Heart Diseases: A Cardiologists Perspective<br/> <b>Dwaipayan BHARADWAJ -</b> Identification of Genetic Markers in Indian Population: A Systematic Chaos</p>   |
| <p><b>12:30 – 1:00 pm</b><br/> <b>Chairpersons</b><br/> <b>Florent SOUBRIER(France)</b><br/> <b>Lalit KANT (Indian)</b></p> <p><b>Rapporteur</b><br/> <b>Ravinder SINGH, Prashant</b><br/> <b>MATHUR</b></p>                               | <p><b>Session VI: Modus Operandi for Development of Research Proposals for Indo France Collaborations</b></p> <p><b>Procedures for collaborative research –Mukesh KUMAR, Alain TEDGUI</b></p>  |
| <p><b>1:00 –1:15 pm</b></p>  | <p><b>Final Recommendations</b></p>  |
| <p><b>1:15 – 1:30 pm</b></p>   | <p><b>Vote of Thanks</b></p>   |
| <p><b>1:30 - 2:30 pm</b></p>   | <p><b>Lunch</b></p>  |

## Roundtable : Reality Check 2007

- Qualifications of a biomarker
- Challenges in Biomarker Discovery And Validation
- Biology Of Early CVD And Diabetes Detection ( Listing Of Molecules Under Process Or Emerging Markers For Early Detection)
- Harnessing The Immune Response In Cardiovascular Diseases, Risk Of CVD In Diabetics And Obese Population
- Emerging Technologies For Proteomic Discovery
- Challenges In Introduction Of Novel Biomarker Testing In Clinical Practice

## Working Group: Identification of Disease Risk: Genetic/ Genomic Approaches

- Genomic Data In Concert with Developing a Biomarker for CVD, Risk of CVD in Diabetics and Obese (Diagnostic, Treatment, Prognostic Markers)
- Emerging Technologies for Genetic Biomarker Discovery
- Data mining Based Biomarker Discovery (including bioinformatics, Genome Wide Discoveries)
- Identifying Adverse Events and Examining Genetic Basis of Adverse Events
- Better Evaluation Tools, Safety Biomarkers

## Roundtable: Critical Paths to Biomarker Development

The session is aimed to provide an initial list of priority research projects that could  
**Discussions will focus on:**

1. Need for better evaluation tools
2. Developing and Testing Calibration Standards
3. Identifying Priorities – Opportunity List\*
4. Improving Public Health
5. Evidence-based framework for determining the clinical utility of cardiovascular biomarkers (e.g. need for biomarkers to study the drug response and categorization of drugs for which markers are required)
6. Identifying Areas for Indo France Collaboration
7. Developing a Roadmap for achieving near and long term progress

**\*Opportunity List should spur a continued dialogue between Indo France researchers, industry and government organizations**