

Intelligent Lean Laboratories

Moving towards faster, better quality, cost effective, and safer results for your organisation to achieve an ideal, world-class laboratory

Singapore

14th & 15th May 2009

Your distinguished chairperson

Vishal Bali CEO

Wockhardt Hospitals Group, India

Mr Bali is recognised as a leader in change management, is an invited member on the Healthcare Council of the World Economic Forum and was nominated as "Indian Healthcare Leader of the year" by Express Healthcare

Featuring a half day workshop on:

Laboratory Performance Improvement

Your workshop trainer:

Andrew Cheah Director – Asia Pacific

Lean Advisors Inc., Malaysia

A highly sought-after speaker for Lean Manufacturing and Supply Chain Management consulting in Asia. Helped corporations successfully implement Lean Initiatives within a short time (less than 6 months). Clients include Intel, B.Braun, Sony, Xerox, Flextronics, Seagate, Globetronics, Clarion, Jabil, Dell, Good Year, and Silterra.

Attend this informative event and gain practical insights on:

- **Discovering** the impact of Lean in your laboratory
- **Eliminating** risk factors and bottlenecks in the process flow
- **Improving** turn-around-time (TAT) to enhance your laboratory performance
- **Sustaining** Lean in your laboratory to gain a competitive edge
- **Designing** the perfect fit for your laboratory
- **Ensuring** laboratory competitiveness through regulatory compliances
- **Exploring** the key issues of GLP and acquiring strategies to address them
- **Developing** a Lean work culture in your organisation to conquer change resistance
- **Gauging** the key elements of outsourcing and retaining core competencies of your laboratory
- **Promoting** continuous improvement in your Lean laboratory

Endorser



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"If you always do what you've always done, you'll always get what you've always gotten."

Henry Ford

Incorporating Lean in your laboratory, designing the perfect it and managing changes to determine success



Your eminent panel of speakers:

John Ward Director of Global Analytical Services

The Coca-Cola Company, USA

Prof. Aw Tar Choon Senior Consultant – Laboratory

Changi General Hospital, Singapore

Changi General Hospital demonstrates that an efficient laboratory can be achieved without total laboratory automation. Prof. Aw was involved in lean laboratory design, structure, logistics and manpower.

Liz Jazwinska Executive Director - New Business & Strategic Alliances

Johnson & Johnson Research, Australia

CEO

Speedx, Australia

Liz produced business plans and identified alternative funding opportunities to support the further development of R&D assets; and spearheaded the setting up intelligent lean laboratories.

Bruno Bianchi Quality Manager

Merck Sharp & Dohme, Australia

Bruno coordinated the drive to a Lean laboratory at MSD Australia through waste elimination and a culture of continuous improvement.

Scott Hawks General Manager – Food Science & Quality Assurance

Nestle, Singapore

Scott is responsible for the chemistry and microbiology laboratories for the Singapore R&D centre. He has published numerous articles and also previously ran Cornell's pilot plant.

Dr Goh Lay Beng Member of Advisory Board – Life Sciences

Nanyang Polytechnic, Singapore

Former COO

Lyndk Biotechnologies, Singapore

Dr Goh possesses a wealth of experience in GLP, GMP and GCP compliance. Her expertise also lies in the design and setup of pilot plant, drug depot, clean room facility and Lean management.

Dr Paul Chang Managing Director – Asia Pacific

Joint Commission International (JCI), Singapore

Dr K. Sadasivan Pillai Associate Director – Quality Assurance

Orchid Research Laboratories, India

Dr Pillai is actively involved in reviewing safety aspects covered in 'Rules and Procedures' across all laboratories in R&D and leading the 'Emergency Response and Contingency Plan' team of R&D.

Jim Gu Deputy Director of Corporate Planning & Development

National University Hospital, Singapore

In early 2008, Jim was tasked to lead the hospital planning team to oversee various facilities remodeling projects. This new portfolio allows him to incorporate his understanding of Lean tools and his commitment to the mission of patient-centricity into various facilities planning/implementing projects.

Norlia Musa Principal Consultant

Standard and Industrial Research Institute of Malaysia (SIRIM), Malaysia

Norlia was actively involved in the development of Malaysian Standards for food and agriculture, consumer products, chemicals and chemical products.

Dr Chua Teck Mean Laboratory Consultant - Temasek Life Science Laboratory

National University of Singapore

Dr Chua has served as a temporary Technical Adviser to the World Health Organization Biosafety Advisory Group (WHO-BAG) and has also served WHO as short term consultant to assist in Laboratory Capacity Building in Indonesia and Mongolia for high containment facility as part of its preparedness in responding to any outbreaks.

Prof. Philip Choo Chairman of Medical Board

Tan Tock Seng Hospital, Singapore

LEAN Champion

National Healthcare Group

0830 Registration & Morning Coffee**0850 Chairperson's opening remarks**

Vishal Bali CEO
Wockhardt Hospitals Group, India

0900 Contact initiation session

In this fast-paced and intense ice-breaker, delegates will introduce themselves to fellow delegates by exchanging business cards.

0915 Session One**Assessing the growing significance of Lean in laboratories to maximise efficiency**

- The positive impact of Lean on the growth and profitability of your organisation
- Streamlining your operations and focusing on value-added activities to boost productivity: A Kaizen approach
- Determining process takt time to meet long-term customer demand changes
- Implementing '5S' tool (Sort, Straighten, Shine, Standardise, Sustain, plus one: Safety) to ensure sustainability of the implementation

Andrew Cheah Director – Asia Pacific
Lean Advisors Inc., Malaysia

1000 Session Two**Conforming to international standards and maintaining compliance to drive lab effectiveness through accreditation**

- Evaluating the significance of accreditation and excelling in lab management
- Ensuring competence and maintaining the integrity of your lab by complying with legislation
- Enhancing your lab's performance by obtaining accreditation and achieving quality goals
- Examining the key elements of global standards and how these can help in achieving accreditation

Dr Paul Chang Managing Director – Asia Pacific
Joint Commission International (JCI)

1045 Morning refreshment and networking break**1100 Session Three****Appraising the value of Lean in the changing world of healthcare: A Wockhardt's perspective**

- Discussing the current scenario and the impact of globalisation in the healthcare industry
- Building a customer centric culture to relate to patients as consumers
- Addressing the need for cost effective healthcare systems in Lean implementation
- Determining the key drivers in enabling the change

Vishal Bali CEO
Wockhardt Hospitals Group, India

1145 Session Four**Sharing the Lean journey experience – A case study of Tan Tock Seng Hospital**

- Strategic planning of Lean management to reduce resistance
- Creating initial stability to sustain Lean implementation
- Driving value and quality throughout the hospital
- Strengthening health and safety measures for patients and staff whilst ensuring high quality service

Prof. Philip Choo Chairman of Medical Board
Tan Tock Seng Hospital, Singapore
LEAN Champion
National Healthcare Group

1230 Networking luncheon**1330 Session Five****Developing a Lean work culture to sustain change in your organisation**

- Exploring the impact of work culture on the implementation of Lean
- Instilling a new work culture to uphold Lean in your lab
- Bridging effective communications to conquer change resistance
- Initiating new standard operating procedures to complement Lean
- Transferring intellectual capital knowledge to facilitate future process improvement projects from internal resources

Bruno Bianchi Quality Manager
Merck Sharp & Dohme, Australia

1415 Session Six**Deciding between outsourcing and retaining core competencies to find the right balance and optimise resources**

- Determining the strategic and financial benefits of outsourcing to labs
- Analysing the process' capabilities to determine labs' competency
- Increasing your core competencies in areas where new capabilities are required through outsourcing
- Achieving process understanding and process transfer to secure the multiple benefits of outsourcing
- Exploring collaborative partnerships as an alternative to outsourcing

Scott Hawks General Manager – Food Science & Quality Assurance
Nestle, Singapore

1500 Afternoon refreshments and networking break**1515 Session Seven – Case Study****Implementing Lean quality management in R&D to increase capacity and streamline processes whilst delivering test results more quickly and accurately**

- Integrating different quality systems to enhance quality of tests and products
- Strengthening safety as an integral part of the quality system
- Improving skills in documentation, data analysis and reporting to ensure compliance to international standards
- Managing overall lab competency through implementation of Lean quality management

Dr K. Sadasivan Pillai Associate Director – Quality Assurance
Orchid Research Laboratories, India

1600 Session Eight**Value stream mapping of your laboratory to identify opportunities and create an improvement plan: A NUH's perspective**

- Analysing the flow of materials and information to gain insights on potential areas of expansions
- Assessing the current value stream map in terms of creating flow to eliminate waste through 'Core Lab Kaizen'
- Strategically planning your process flow to focus on value-added activities
- Creating an action plan based on your value streams for flow-focused improvement
- Increasing lab capacity to meet growing demand

Jim Gu Deputy Director of Corporate Planning & Development
National University Hospital, Singapore

1645 Session Nine**Developing world class analytical food safety/quality assurance programmes in today's challenging economic environment**

- Analysing how the external landscape is shaping the way in which we need to gather "analytical intelligence"
- Navigating the course from the World's most "recognized brand" to most "respected brand"
- Enhancing lab performance and analytical capabilities through quality assurance
- Deploying new analytical techniques to manage labs effectively
- Delivering results at lowest possible system cost

John Ward Director of Global Analytical Services
The Coca-Cola Company, USA

1730 Chairperson's closing remarks and close of Day One**Who should attend**

Chief Scientific Officers (CSOs), VPs, Directors, General Managers, Managers, Heads of:

- Laboratories
- Quality Control
- Research & Development
- Strategic / Corporate Planning
- Quality Assurance
- Technical Assurance / Services
- Plant
- Hospital Planning

From:

- Life Sciences (Pharmaceuticals, Biotechnology and Medical Devices)
- Hospitals
- Fast Moving Consumer Goods (FMCG)
- Oil, Gas & Chemicals/ Petrochemical
- Microbiology Laboratories
- Cosmetics / Personal Care Products
- Government (University, Research Institutions)
- Commercial testing laboratories
- Food & Beverage (F&B)
- Analytical / Testing Laboratories
- Forensics Laboratories
- Mining and Minerals

marcus evans would like to thank everyone who has helped with the research and organisation of this event, particularly the speakers and their staff for their support and commitment.

About the Media Partners

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Pharma Asia is the leading source of information for scientists in Asia looking to stay abreast of innovative technologies and trends impacting the pharmaceutical industry. Launched in February 2006, the publication provides timely and useful insights into cutting-edge techniques and practices for improving the pace of pharmaceutical research and development in the region. It features in-depth articles on technologies and research relevant to the industry, news and market trends, new product offerings, listings of regional events and profiles of relevant companies and service providers. Pharma Asia is published bi-monthly in English, with a target of 10,000* qualified readers. For more information, please visit us at www.PharmaAsia.com.

Asia Pacific Biotech News (APBN), the first and only fortnightly report on pharmaceutical, medical, agricultural and environmental sciences in Asia Pacific. APBN is a premium magazine providing industry professionals and experts with breaking news and updates on biotechnology in Asia Pacific. With its rich contents accompanied by insightful and in-depth reports, APBN is widely read by professionals and researchers in the biotechnology sector around the world. Our magazine has a wide reach to the life sciences and biotech community and is present in major conferences in the region.

Cal Lab Magazine is a quarterly publication that covers measurement science and instrument calibration for managers, engineers, technicians. Covers international standards, calibration techniques, new technology for measurement areas: electrical, dimensional, temperature, pressure, flow, mass. Calendar of worldwide conferences and seminars in paper publication and online at www.callabmag.com. Recent issues can be downloaded free.

Friday 15th May 2009

0830 Morning Coffee**0855 Chairperson's opening remarks**

Vishal Bali CEO
Wockhardt Hospitals Group, India

0900 Session One**A Johnson & Johnson case study: Increasing R&D productivity through divestment of traditional pharma assets**

- Ingraining Lean principles into the R&D division to ensure cost effectiveness of processes.
- Divesting pharma R&D assets through "spin-offs" to optimise manpower
- Exploring new paradigms for pharma R&D by way of the 'divestment' approach
- Capitalising on the strengths and opportunities and overcoming pitfalls in this approach to maximise your ROI

Liz Jazwinska Executive Director - New Business & Strategic Alliances
Johnson & Johnson Research, Australia
CEO
SpeeDx, Australia

0945 Session Two**Continuous process improvement in your Lean journey: A case study on Changi General Hospital**

- Strategic planning and scorecards for labs
- Setting clear targets for measurable return
- Driving value and quality into the laboratory
- Promoting staff participation in continuous improvement projects to generate a sense of belongingness to the program

Prof. Aw Tar Choon Senior Consultant – Laboratory
Changi General Hospital, Singapore

1030 Morning refreshments and networking break**1045 Session Three****Strengthening health and safety measures in the lab to promote a better working environment**

- Addressing the importance of health surveillance programs to safeguard the health and safety of staff against potential hazards in the lab
- Identifying hazardous materials in the lab to augment safety
- Developing risk management strategies in the lab to reduce negative impacts
- Maximising overall efficiencies of operations by redesigning work cells to minimise fatigue

Norlia Musa Principal Consultant
Standard and Industrial Research Institute of Malaysia (SIRIM), Malaysia

1130 Session Four**Restructuring and redesigning your laboratory to make it work for you - criteria and prerequisites**

- Creating more space in the lab by removing unnecessary items
- Reducing overall travel distance by making layout changes – relocating equipments and furniture
- Achieving a better line of sight and ergonomics to promote a better working environment
- Studying the process workflow of the entire laboratory to eliminate inefficiency
- Minimising cross sample contamination to secure accurate test results
- Evaluating the operational benefits of Lean work cells

Dr Chua Teck Mean Laboratory Consultant - Temasek Life Science Laboratory
National University of Singapore

1215 Networking luncheon**1315 Session Five****Lean Six Sigma – Improving turn-around time and reducing waste**

- Identifying wastage in seven areas
- "Poka Yoke" methods in reducing waste
- "Trystorming" for strategic facility layout and work process reconstruction to abolish insufficient capacity and poor layout
- Eliminating traditional discipline distinctions to build closer scrutiny of functions

Dr Goh Lay Beng Member of Advisory Board - Life Sciences

Nanyang Polytechnic, Singapore
Former COO
Lynk Biotechnologies, Singapore

1400 Workshop**Laboratory performance improvement**

The laboratory often maintain high levels of work in process which inevitably results in lots of effort being expended in controlling, tracking and prioritising samples and in planning analyst work. Therefore, effective improvement strategy is the key to success of a laboratory and an organisation.

As the lab manager, your success is measured by your ability to manage the performance of your teams by boosting their productivity. The goal of this session is to equip the practising manager with skills of problem solving through the effective Lean tools. The focus of this workshop is on the lab manager, with the ultimate goal of improving the performance of the whole department through working together as a team and utilising effective Lean tools to augment your lab performance.

By attending this workshop you will gain insights into:

- Strategic performance improvement
- The Lean Lab Kaizen: Focusing on the two key critical elements to the success of your lab performance: Process and people
- Resolving roadblocks to effective performance improvement
- Step by step guide in improving the lab performance
- Effective Lean management strategies to improve lab performance – sample preparation, phasing the analysis, priority testing
- Prompting effective time management to generate faster results and be more customer centric
- Utilising visual control to manage the stress of your lab staff
- Cross-training staff in the laboratory to overcome the lack of skilled expertise and rip labour costs
- Case study: Hospital Laboratory Specimen Receiving - Improvement of 25% within 1 week

Andrew Cheah Director - Asia Pacific
Lean Advisors Inc.

1530 Afternoon refreshments and networking break**1545 Workshop re-commences****1715 Chairperson's closing remarks and close of Day Two****Why you cannot miss this event**

"Lean" is the practice that considers the expenditure of resources for any means other than the creation of value for the presumed customer to be wasteful, and thus a target for elimination. In a more basic term, "more value with less work". It focuses more on improving processes rather than achieving specific results. This concept on improvement and 'process re-thinking', optimises processes thereby increasing value and ROI.

Laboratories worldwide face the same economic pressure, to do more with less. To cope with this situation many labs have change their operations with Lean Six-Sigma approaches. Reducing or eliminating needless steps – such as inspection, wait times and travel distances – while focusing on activities that customers are willing to pay for is at the core of Lean.

Lean has worked greatly for the manufacturing industry and now as the competition between laboratories in various industries grows, laboratories are looking into streamlining their value streams to reduce operational costs and boost their productivity. Lab managers need to understand a vast array of quality systems requirements—systems that require intricate documentation and workflow management. Health, safety and environmental regulations are changing rapidly, and lack of knowledge about these changes is no excuse. Attracting and retaining quality staff is a major challenge. And within the next several years, the majority of lab managers will be involved in major expansions, restructuring or retrofit their facility.

With intensifying competition, labs worldwide are leveraging Lean methods to enhance their performance. In order to gain a competitive edge, hospitals, independent labs and pathology groups are using this fast growing trend in laboratory management. To enhance performance, it is essential to optimise specimen flow, boost productivity, reduce turn-around time, and improve overall clinical and operational efficiency. The Lean philosophy helps to improve crucial performance metrics and quality.

To maximise their ROI, laboratories too have to leverage the power of Lean – action, involvement and quick results.

About the Endorser

The **Pharmaceutical Society of Singapore (PSS)** is the only professional, non-profit organisation representing pharmacists in Singapore. Originally founded in 1905 as the Straits Pharmaceutical Society, our membership comprises pharmacists practicing in the community, hospital, marketing and sales, distribution, research, regulatory, and academic sectors. Today it is steered by an elected council comprising a president and 11 council members. PSS aims to improve the public's understanding of medication and its use, promote responsible self-care and promote safe and appropriate use of medicines.

About the Technology Media Partner

'eHEALTH' is a niche monthly publication (print and online) focusing on healthcare ICTs technologies and applications. It is committed to providing rich and relevant content for healthcare stakeholders, medical professionals, researchers and policy makers across the world for global capacity building and knowledge exchange towards better eHealth adoption. The publication covers a wide array of issues around technology, policy, standards and best practices of eHealth through news, analysis, expert articles, case studies and interviews. (www.ehealthonline.org)

About the workshop trainer

Andrew is the director for Asia Pacific region of Lean Advisors Inc. He has successfully trained and implemented Lean to both multinational corporations and local SMEs. He has worked with various multinational corporations for more than 10 years in areas of material, supply chain management and production and operational planning. He is highly regarded for his ability in setting up material and production planning system for fast-paced electronics manufacturing operations.

Furthermore, Andrew has conducted trainings in Malaysia, Singapore, Vietnam, Thailand, Mauritius, United Kingdom, China, Saudi Arabia, Philippines, Egypt, Jordan and United Arab Emirates. He is known for his effective results-oriented training solution. He has successfully helped both multinational corporations and local SMEs from various countries implement Lean initiatives within a short time (less than 6 months) successfully.

Andrew is a Certified Professional Business Coach from the International Managers Association, UK. He is also a founding member of the International Association of Coaches, and a member of CoachVille, the largest coaching organisation in the world. He holds a MBA from Winona State University, Minnesota, USA and a Bachelor of Economics (Hons) from Northern University of Malaysia.

Speakers' Profile

Speakers

Dr Paul Chang Managing Director – Asia Pacific **Joint Commission International (JCI), Singapore**

Dr Paul Chang is Managing Director of Joint Commission International's Asia Pacific Office. In this capacity, he is responsible for furthering the development of relationships between JCI and Asia-Pacific health care organisations and works with regional Ministries of Health, other governmental agencies, NGOs, hospitals, laboratories and other health care organisations in their efforts to reduce risk and improve health outcomes.

Prior to this, Dr Chang was overseeing clinical quality, risk management, quality improvement and JCI accreditation in Changi General Hospital, an 800 bed Singaporean public hospital, and was part of the management team that led the hospital to achieve JCI accreditation in June 2005 as well as JCI Disease specific certification in 2 Cardiology programs – Acute Myocardial Infarct management and Heart Failure Management - in January 2007. Dr Chang also has working experience in both the Singapore Ministry of Health and in various Singapore hospitals. Dr Chang earned his medical degree and his Masters in Public Health from the National University of Singapore. He is a Certified Professional in Healthcare Quality and is also a trained JCI accreditation surveyor.

Bruno Bianchi Quality Manager **Merck Sharp & Dohme, Australia**

Bruno Bianchi has over 15 years experience in the Pharmaceutical industry working in a wide variety of roles across Quality Control, Quality Assurance and Manufacturing/Packaging Operations.

Joining Merck Sharp & Dohme Australia (MSDA) in 1999, Bruno has during this time taken on a range of responsibilities and projects within the Quality Operations department. As Laboratory Manager in a highly regulated TGA and FDA environment Bruno coordinated the drive to a Lean Laboratory through waste elimination and a culture of continuous improvement. This was achieved in order to create a responsive business unit and beat wider business objectives while maintaining critical quality and safety compliance requirements.

In 2008 Bruno assumed management of the Quality Assurance Release Department at MSDA. Amongst his day to day duties Bruno also facilitates the Merck Asia Pacific Laboratory Managers Tactical Ring and represents the Asia Pacific region on the Merck Global Laboratory Forum. He is also the Merck Sharp & Dohme Australia site 5S Lead and GMP Training Coordinator.

Dr K. Sadasivan Pillai Associate Director - Quality Assurance **Orchid Research Laboratories, India**

Dr K. Sadasivan Pillai is the Associate Director for Quality Assurance of Orchid Research Laboratory. With secured post graduation in Experimental Biology and Ph.D. in Environmental fluoride toxicology, he also has one year post doctoral experience in aquatic toxicology and 18 years industrial experience in regulatory toxicology of agrochemicals and drugs.

Dr Sadasivan has taught in post graduate school teaching Biostatistics and Biochemistry. He is the Life member of 12 Scientific Societies and Editorial member of 3 national journals. He has edited 3 books; contributed chapters to 3 books and has published more than 100 research papers and 50 popular articles. He has also co-authored a book with a Japanese scientist entitled, 'Statistics in Experimental Toxicology and Pharmacology', published by Science Publishers, USA.

He has been selected as the Member of Board of Studies in Biotechnology, University of Madras. He has also been the Principal investigator of 2 research projects funded by Department of Science & Technology. He has participated several training courses in GLP including the one organized by British Association of Research Quality Assurance, Cambridge, UK. Furthermore, Dr Sadasivan has conducted trainings on GLP for the GLP Compliance Monitoring Authority, Govt. of India. He has successfully completed a 2 week-course on Laboratory Animal Science at Utrecht University, Netherlands. He was also nominated as a member of the Task Force constitute by GLP Monitoring Authority for guiding National GLP Monitoring Authority in the preparation of Mutual Joint Visit by OECD Secretariat.

At present, holding the position of Head of Quality Assurance-GLP in Orchid Research Laboratories, he is actively involved in reviewing safety aspects covered in 'Rules and Procedures' across all laboratories in R&D, and leading 'Emergency Response and Contingency Plan' team of R&D.

Norlia Musa Principle Consultant **Standard and Industrial Research Institute of Malaysia (SIRIM), Malaysia**

Madam Norlia Musa is the Principal Consultant under the Quality Excellence Program of the Quality Services Department of SIRIM. She has served in the organisation for more than 26 years. She holds a BSc Honors in Chemistry from Leeds University and a Masters Degree in Science in Advanced Analytical; Chemistry from the University of Bristol, United Kingdom. She was actively involved in the development of Malaysian Standards for food and agriculture, consumer products, chemicals and chemical products. She has 18 years of laboratory experience in the Chemical Testing Section of SIRIM QAS International, providing testing services in food, water, consumer products, industrial products and textiles. She is actively engaged in providing consultancy and trainings. Furthermore, Norlia is an expert in ISO/IEC 17025 and ISO 15189 as well as standards based management system such as ISO 9001, ISO 22000 and Malaysian Halal Certification standards.

Standards and Industrial Research Institute of Malaysia (SIRIM) was established with the merger of Standards Institution of Malaysia (SIM) and National Institute for Scientific and Industrial Research (NISIR). It is a statutory body under the Ministry of Science, Technology and Environment Malaysia and is governed by the SIRIM Council.

In line with the 9th Malaysia Plan's main thrust areas, SIRIM will continue to enhance its role in industry development by becoming a strategic partner to the industry through Research, Technology Transfer, Technology Incubation and Skill Development. SIRIM is a wholly-owned company of the Malaysian Government under the Minister of Finance Incorporated. Registered on 15 November 1995 and in full operation as a corporate entity on 1 September 1996, and since then, it has successfully delivered its role as the national agency for industrial development.

Dr Chua Teck Mean Laboratory Consultant - Temasek Life Science Laboratory **National University of Singapore**

Dr Chua is the current president of the Asia-Pacific Biosafety Association (APBA) and was co-chair of the International Biosafety Working Group (IBWG) 2006-2007. Dr Chua is also the recipient of the Arnold Wedum Memorial Lecture Award 2008 on 'Integration of a Global Biosafety Community' from the American Biosafety Association (ABSA).

Dr Chua has had extensive experiences in the past 12 years on laboratory design and construction especially in the area of biocontainment for biomedical facilities. He completed the WHO/NIH(USA) 'Train-the-Trainer Course on Laboratory Biosafety' and has helped train, design, built and operate a number of BSL-3 biomedical facilities in the region that handle infectious material and experimental animals.

He has served as a temporary Technical Adviser to the World Health Organization Biosafety Advisory Group (WHO-BAG) 2005-2006 and has also served WHO as short term consultant to assist in Laboratory Capacity Building in Indonesia and Mongolia for high containment facility as part of its preparedness in responding to any outbreak of emerging or re-emerging infectious disease such as the Avian Influenza, etc.

Scott Hawks General Manager - Food Science & Quality Assurance **Nestle, Singapore**

Scott Hawks is the Food Science and Quality Assurance Group Manager in Singapore responsible for the Chemistry and Microbiology laboratories for the Singapore R&D Center. In this role he and his team work to provide information to the R&D Centers and the Markets in order to help get products to the market faster while still maintaining a high level of quality, and regulatory compliance. He received his BS Food Science from Michigan State University. Before joining Nestle, he was the laboratory director for Covance Laboratories in Singapore. Scott did research at Cornell University for 15 years during which time he developed 2 patents, published numerous articles on whey protein functionality, and ran Cornell's pilot plant. He has also done research at Purdue and Michigan State Universities in the area of enzyme production and extraction technologies.

Vishal Bali CEO
Wockhardt Hospital, India

Vishal Bali is the CEO for the Wockhardt Hospitals group in India. Wockhardt Hospitals is amongst India's largest healthcare providers with a national network of super-specialty hospitals. In his current assignment Mr Bali is responsible for driving the corporate strategy, value growth and expansion of the Wockhardt Hospitals chain across geographical locations in India and strengthening the International presence of the group hospitals.

Mr Bali has been in the healthcare delivery sector for more than a decade and half and is recognised amongst the leaders in the change management of the healthcare delivery sector in India. He began his career at Wockhardt Hospitals and during his tenure has held several positions of increasing responsibility. His expertise in management analysis and successfully integrating healthcare strategy, operations and management through information technology has resulted in award winning services. Mr Bali completed his Bachelor's in Science and Master's in Business Administration from Bombay University and has completed an advance program in Hospital Management from Boston. Besides serving on the board of Wockhardt Hospitals he also serves on the advisory board of Harvard Medical International. He is an invited member on the Strategic Initiatives group of Joint Commission International, US and on the Healthcare Council of the World Economic Forum. Mr Bali is an active participant in shaping the growth of the healthcare sector in India. He has recently been nominated as Indian Healthcare Leader of the year by Express Healthcare. He is also an active member of the Indian Healthcare Federation and Confederation of Indian Industry and is a globally recognised industry public speaker.

Jim Gu Deputy Director of Corporate Planning & Development
National University Hospital, Singapore

Jim received his Hotel Management training in Australia and United States (Cornell University). He completed his Master in Business Administration with University of Western Michigan. Though Hotel management work was engaging, he eventually found his calling in Hospital management. He spent 2 years at Mount Alvernia Hospital before joining the National University Hospital (NUH) in 2001. As such, Jim brings with him an array of experiences in process re-engineering, business units restructuring, knowledge management, corporate strategic planning, business development, talent management and risk management etc.

In 2003, NUH was in battle with "SARS". Having seen the impact of this war, Jim understood the importance of tighter process control and has since been part of various process improvements projects in the Hospital using Lean tools. Since 2006, he has been involved in conducting various training sessions for inculcating lean "culture".

In early 2008, Jim was tasked to lead a hospital planning team to oversee various facilities remodeling projects. This new portfolio allows him to incorporate his understanding of lean tools and his commitment to the mission of patient-centricity into various facilities planning/implementation projects. As a strong believer in engaging work to value-add, eliminate waste and develop people, Jim aspires to continue contributing in advancing healthcare for both his generation and the generations to come.

Prof. Philip Choo Chairman of Medical Board
Tan Tock Seng Hospital, Singapore
LEAN Sponsor
Tan Tock Seng Hospital
LEAN Champion
National Healthcare Group
Senior Consultant - Dept of Geriatric Medicine
Tan Tock Seng Hospital

Tan Tock Seng Hospital, established in 1844, is a teaching hospital. Dedicated to promoting health and to sustaining the integrity of people's lives through education and medical treatment, 5300 employees carry out the services of Tan Tock Seng Hospital. Prof Choo effectively maintains the title of Chairman Medical Board, supervising the doctors and working within the Hospital to train student physicians. Dedicate to healing, major highlights of his career include patient care and student instruction. For the past 2 years, Prof Choo has been chairing the hospital's effort in implementing Lean. In addition to his work for Tan Tock Seng Hospital, Prof Choo is also an accomplished author of several books and numerous articles.

Dr Goh Lay Beng Member of Advisory Board - Life Sciences
Nanyang Polytechnic, Singapore
Former COO
Lynk Biotechnologies, Singapore

Dr Lay-Beng Goh is a biomedical scientist who has over 17 years of experience in R&D and lab management. She has also led several R&D products to commercialisation and managed intellectual properties for technologies. Dr Goh was formerly the Chief Operating Officer and Research Director of Lynk Biotechnologies Pte Ltd, the Director of MediLynk Pte Ltd, a transdermal product company, and the Director of DynaLynk Pharma Pte Ltd, a GMP-certified topical pharmaceutical manufacturing facility. Dr Goh possesses a wealth of experience in Good Laboratory Practice (GLP), Good Manufacturing Practice (GMP) and Good Clinical Practice (GCP) compliance. Her expertise also lies in the design and setup of animal holding unit, analytical/microbiological laboratory, pilot plant, drug depot, clean room facility, etc, for Lean Management. Dr Goh's research experience spans from pre-clinical studies to clinical studies, from molecular biology to topical skin delivery and animal physiology.

A technopreneur at heart, Dr Goh is also passionate about education. Dr Goh currently sits on the Life Sciences Advisory Committee of the Nanyang Polytechnic's School of Chemical & Life Sciences, and has been appointed as a Director on the board of a new University in China. She is also keen on establishing a Cosmetology degree program with R&D in the region. Dr Goh has partnered with Ben Apex Pte Ltd and other consulting groups to offer consultancy and interim management in strategic business planning, crisis management and quality assurance. Dr Goh graduated from the National University of Singapore, and obtained her Doctor of Philosophy in Biomedical Research at the Ninewells Hospital, University of Dundee, Scotland, UK. She was formerly a scholar of ICI (Singapore) and Pfizer (UK).

Liz Jazwinska Executive Director - New Business & Strategic Alliances
Johnson & Johnson Research, Australia
CEO
SpeedX, Australia

Liz Jazwinska has over 12 years of industry experience. Liz is currently CEO of SpeedX, a molecular diagnostics company spin out from Johnson & Johnson. Prior to setting up SpeedX, Liz spent 7 years as Executive Director of New Business and Strategic Alliances at Johnson & Johnson Research Pty Limited (JJR) where her primary responsibilities were to identify and evaluate new business opportunities in the Asia Pacific Region for partnering with Johnson & Johnson (J&J) global companies and to support the development of JJR products through R&D partnerships with J&J and third parties. During this time, Liz established and led the J&J Asia Pacific partnering group and she successfully negotiated a substantial number of agreements with biotech companies and academic groups across India, China, Singapore, Australia and New Zealand. Most recently, Liz was closely involved in the divestment of the JJR R&D portfolio into spin outs where her role was to produce initial business plans and identify alternative funding opportunities to support the further development of the R&D assets; a large part of this work involves planning of outsourcing and working with core teams to setting up intelligent lean laboratories. Prior to joining JJR, Liz held a number of positions as Assistant Director in Human Genetics and Pharmacogenetics in SmithKline Beecham (now GSK) in the UK, Business Development Manager at the University of Sydney and Senior Research Fellow in Human Genetics at the Queensland Institute of Medical Research.

During her academic career Liz authored 62 publications in peer-reviewed journals and continues to act as an expert reviewer for international molecular and medical journals and science funding agencies. In addition she is closely involved with Australian Research Council (ARC), the major science funding agency in Australia

John Ward Director of Global Analytical Services
The Coca-Cola Company, USA

John Ward is the Director of Global Analytical Services and Project Manager for the Company's Global Laboratory strategy. John's primary responsibility is to establish the Company's strategic direction for analytical support including the identification of capability and capacity needs, resources required (people, processes and equipment) and the process and methodologies necessary to deliver world class technical support to the Company's global operating units. In addition, John is responsible for the design, construction, startup, and management of the Company's new Technical Centers in China (Shanghai), Mexico (Mexico City), India (Pune) and South Africa (Johannesburg).

John joined The Coca-Cola Company in May 1997 as Manager of Quality Audit for Australia, China and Philippines before being promoted to the position of Audit Director for the Middle and Far East (Nov 1997) based in Sydney, Australia. In January 2000, John moved to Atlanta to take over as Manager, Quality Systems, before taking on the position of Director, Global Quality (concentrate operations, supplier and laboratory quality programs) in 2002. In this role John helped to establish the global framework for analytical performance, and helped make the Global Laboratory Strategy a reality.

Prior to joining Coca-Cola, John worked for Merck & Co. as a Quality Assurance Manager, and for the New South Wales Department of Health as a Food Inspector/Prosecution Officer. John received a Bachelor's degree in Science, majoring in Microbiology and Biochemistry from the University of New South Wales, Australia in 1988, and a Diploma in Education also from the University of New South Wales in the same year.