



Workshop: Quality Management, Biosafety and Facility Design:
20-24 March 2017, Hanoi, Vietnam

| DAY 1, Monday 20 th March 2017- Introduction and Quality Management | | |
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| | Topic | Speaker |
| 8h00 – 8h30 | Registration | Registration desk |
| 8h30 – 9h00 | Welcome and introduction by Vabiotech | Dr. Do Tuan Dat, Vabiotech |
| 9h00 – 9h15 | Keynote speech by the Drug Administration Department of Vietnam (DAV) | Mr. Nguyen Tan Dat, DAV |
| 9h15 – 10h00 | DCVMN introduction | DCVMN |
| 10h00 – 10h30 | Coffee break | |
| 10h30 – 12h00 | Quality Management: <ul style="list-style-type: none">- Quality Policy- Quality Manual | Dr. Maureen Dennehy |
| 12h00 – 12h30 | Test 1 | |
| 12h30 – 13h30 | Lunch | |
| 13h30 – 15h00 | Quality management (cont) <ul style="list-style-type: none">- Requirements of ICH and other guidance documents.- Link to Management Review and Quality Objectives | Dr. Maureen Dennehy |
| 15h00 – 15h30 | Quality Management: <ul style="list-style-type: none">- Excellence Through Education- Building a Strong Quality Culture- Training Programs for GMP | Dr. Maureen Dennehy |
| 15h30 – 16h00 | Coffee break | |
| 16h00 – 17h00 | Quality Management: <ul style="list-style-type: none">- Survey- Requirements- Induction, On-the-Job, Competence, Senior Management- Warning Letters | Dr. Maureen Dennehy |
| 17h00 – 17h30 | Q&A | |

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| 17h30 | Adjourn | |
| 18h00 | Welcome reception | |

| DAY 2, Tuesday 21 st March 2017- Biosafety and Biorisk Management | | |
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| 8h30 – 17h30 | Optional private Consultation on Quality Policy and Quality Manual | Dr. Maureen Dennehy |
| | Topic | Speaker |
| 8h30 – 9h00 | Background and introduction | Dr. Paul Huntly |
| 9h00 – 10h00 | Biosafety and biosecurity Standards and regulations Principles of containment Containment levels and biorisk management | Dr. Paul Huntly |
| 10h00 – 10h30 | Coffee break | |
| 10h30 – 12h00 | Continued | Dr. Paul Huntly |
| 12h00 – 12h30 | Element 1: Biorisk Management System | Dr. Paul Huntly |
| 12h30 – 13h30 | Lunch | |
| 13h30 – 14h00 | Element 2: Risk Assessment | Dr. Paul Huntly |
| 14h00 – 14h30 | Element 3: Biological Agents and Toxin Inventory and Information | Dr. Paul Huntly |
| 14h30 – 15h00 | Element 4: General Safety | Dr. Paul Huntly |
| 15h00 – 15h30 | Element 5: Personnel and Competency | Dr. Paul Huntly |
| 15h30 – 16h00 | Element 6: Good Microbiological Techniques | Dr. Paul Huntly |
| 16h00 – 16h30 | Coffee break | |
| 16h30 – 17h00 | Element 7: Clothing and Personal Protective Equipment (PPE) | Dr. Paul Huntly |
| 17h00 – 17h30 | Element 8: Human Factors | Dr. Paul Huntly |
| 17h30 | Adjourn | |

| DAY 3, Wednesday 22 nd March 2017- Biosafety and Biorisk Management | | |
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| 8h30 – 17h30 | Optional private Consultation on Quality Policy and Quality Manual | Dr. Maureen Dennehy |
| | Topic | Speaker |
| 8h30 – 9h00 | Element 9: Healthcare | Dr. Paul Huntly |
| 9h00 – 9h30 | Element 10: Emergency Response and Contingency Planning | Dr. Paul Huntly |
| 9h30 – 10h00 | Element 11: Accident/ Incident Investigation | Dr. Paul Huntly |
| 10h00 – 10h30 | Coffee break | |
| 10h30 – 11h00 | Element 12: Facility Physical Requirements | Dr. Paul Huntly |
| 11h00 – 11h30 | Element 13: Equipment and Maintenance | Dr. Paul Huntly |
| 11h30 – 12h00 | Element 14: Decontamination, Disinfection and Sterilisation | Dr. Paul Huntly |
| 12h00 – 12h30 | Element 16: Security | Dr. Paul Huntly |
| 12h30 – 13h30 | Lunch | |
| 13h30 – 15h30 | GAPIII – example of disease-specific standard for vaccine production | Dr. Paul Huntly |
| 15h30 – 16h00 | Q&A and open discussion | |
| 16h00 – 16h30 | Coffee break | |
| 16h30 – 17h30 | Using separation processes to Prevent and remove bioburden from critical BioPharmaceutical processes" <ul style="list-style-type: none"> - Risk based identification of critical and moderately critical biopharmaceutical operations - Evaluating removal mechanisms based on quality attributes - Monitoring bioburden as part of an overall Biosafety strategy | Mr. Michael Payne |
| 17h30 | Adjourn | |

| DAY 4, Thursday 23 rd March 2017- Facility Design | | |
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| 8h30 – 17h30 | Optional private Consultation on Biosafety (contact DCVMN secretariat for appointment) | Dr. Paul Huntly |
| | Topic | Speaker |
| 8h30 – 9h30 | Regulatory basics for facility design (WHO GMP): Summary of current GMP requirements | Christian Bachofen |
| 9h30 – 10h30 | Regulatory basics for facility design (WHO biosafety): Summary of current biosafety requirements | Christian Bachofen |
| 10h30 – 11h00 | Coffee break | |
| 11h00 – 12h30 | Case study: Observations made by CB Consultancy during inspection of vaccine manufacturing facilities (discussion of interesting examples regarding violation of GMP / biosafety requirements; avoidance of inspection observations by using a thorough “quality by design” approach => related risk assessments will be performed as an interactive exercise together with the audience; solutions for remediation of the observations) | Group |
| 12h30 – 13h30 | Lunch | |
| 13h30 – 15h00 | Case study continued | Group |
| 15h00 – 16h00 | Case Study: Differences in the facility design philosophy / principles between Europe and Asia (presentation and discussion of examples for different design approaches) | Group |
| 16h00 – 16h30 | Coffee break | |
| 16h30 – 17h30 | Case study continued with group discussion | Group |
| 17h30 | Adjourn | |

| DAY 5, Friday 24 th March 2017- Quality by Design | | |
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| | Topic | Speaker |
| 8h30 – 9h00 | Recap from yesterday | Christian Bachofen |

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| 9h00 – 10h30 | Steps, structure and organization of a facility design, planning and construction project (structured approach: Project definition (URS), conceptual and basic design, detailed design, construction, commissioning) | Christian Bachofen |
| 10h30 – 11h00 | Coffee break | |
| 11h00 – 12h00 | Continued | Christian Bachofen |
| 12h00 – 12h30 | Test 2 | |
| 12h30 – 13h30 | Lunch | |
| 13h30 – 14h30 | Quality management and “quality by design” activities which are performed during a facility design, planning and construction project (risk assessments, design review, design qualification, critical review and approval stops, controlled implementation of project changes, controlled remediation of errors and defects) | Christian Bachofen |
| 16h00 – 16h30 | Coffee break | |
| 16h30 – 17h30 | Test discussion and test result Q&A and wrap up | Christian Bachofen |
| 17h30 | Adjourn | |

Course presenters

Dr. Maureen Dennehy owns an independent pharmaceutical consulting (Quality Assist) based in Cape Town, South Africa. It offers services primarily in Quality Assurance, Pharmaceutical Quality Systems setup and improvement, Quality Risk Assessment and Qualification/ Validation. She is also an associate at McGee Pharma International, based in Dublin, Ireland. Her primary interest is in manufacture of vaccines. Maureen has a PhD in vaccine development and assessment from the Institute of Infectious Disease and Molecular Medicine, University of Cape Town. She has 20 years of experience in industry, which started with QC of BCG and Rabies vaccines at the State Vaccine Institute, and later led to Quality Manager positions at Biovac.

Dr Paul Huntly is Managing Director of Riskren, specialising in risk assessment and management associated with laboratory biorisk management (biosafety / biosecurity), infection control in healthcare, and areas concerning GAPIII, addressing measures associated with poliovirus eradication and containment. Paul has provided consultancy advice on



biological and conducted audits and assessments for a variety of organisations, including the WHO, China CDC, the American Society for Microbiology (ASM), A*STAR (Singapore), the Swedish National Institute for Infectious Disease Control, the Canadian Science Centre for Human and Animal Health and GSK Biologicals (Belgium). A microbiologist by training, Paul is based in Singapore, but works extensively throughout Asia and the rest of the world.

Mr. Christian Bachofen, is an independent engineering consultant with Project Management experience, as cGMP specialist for Clean Room and HVAC Design, Pharma Water Systems Design, Quality Management, Layout for Pharmaceutical Facilities, Vaccine Production Facilities, Fill Finish Facilities.

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