IWGT 2017, Tokyo: Proposed time table

Date & time	Main lecture hall	Seminar room A	Seminar room B

8th 10.00
 	
10.30 – 12.00
	Welcome & Introduction	**A Working Group will revisit the bacterial mutagenicity (Ames) test, led by Rita Schoeny, USA, to discuss topics including these.**
		• Assay criteria and recommendations
		  • Positive and negative responses: Use of historical control data; should there be a formal rule, e.g., fold-increase, GEF, specified statistical procedure(s), a subjective approach, or a combination of these factors?
		  • Criteria for acceptable assays; more accurate descriptions of assay outcomes.
		  • Recommendation for demonstration of laboratory proficiency
		• Consideration of widely used strains as well as what can be learned from use of others: Using a data-based approach to defining appropriate strain sets for various uses; how can strains be obtained and maintained
		• Status of *in silico* SAR tools for prediction of mutagenicity in the Ames test: What is established? What is being predicted from *in silico* genetic toxicity testing? What are critical problems, and how are these being approached?
			A Working Group on the use of 3D models, led by Stefan Pfuhler, USA. The focus of the WG will be:
			• Introduction to the concept of the use of tissue models in genetox testing
			• Status review of available genetox data generated in skin, liver and lung 3D tissue equivalents
			• Discussion of validation status of the most developed 3D assays – the 3D skin micronucleus and comet assays
			• Discussion of potential uses and test strategy fit
			• Identification of further steps needed to achieve regulatory implementation
			• Develop recommendations and capture consensus statements

8th **13.30-17.30**		**Ames WG (continued)**	**3D WG (continued)**
8th **18.00-20.00**		**Welcome reception – in cafeteria**	

9th
 	
09.00-12.30
		A Working Group on emerging in vitro mammalian genotoxicity systems: endpoints and cell types, led by Bhaskar Gollapudi, USA. The group will critically assess emerging in vitro tools for measuring gene mutations in mammalian cell cultures, covering the following points:
		• Basic algorithm for strategic placement of in vitro mutation assays
		• Define basic principles of emerging assays
		• Define current state of emerging assays
		• Define research needs for the emerging assays to make them useful for regulatory applications
		• In vitro models that can be used as surrogates for predicting in vivo response at the same locus
		  • Higher throughput assays that are less laborious and less expensive
		  • In vitro models to address mechanistic questions dealing with in vivo mutagenicity
		
		• Focus groups will be:
		  • Improving existing assays by applying new technologies
		  • Mutation assays using cell lines from transgenic rodents
		  • In vitro Pig-a mutation assays
		  • Novel approaches to detect gene mutations in cell cultures
			A Working Group will discuss aspects of risk assessment of aneugens, led by Francesco Marchetti, Canada, covering:
			• Setting the scene: Molecular mechanisms of chromosome segregations
			• Current regulatory framework: pitfalls and limitations
			• Utility of the Adverse Outcome Pathway framework for identifying aneugens
			• Role of aneuploidy in carcinogenesis
			• Aneuploidy in germ cells and hereditary diseases
			• Develop consensus on implications of aneuploidy for human risk assessment

9th **14.00-18.00**		**A Working Group, led by David Kirkland, UK, will discuss in vivo strategies:** • Can we give more precise advice on appropriate in vivo testing to follow up an in vitro positive? • What can we learn from the historical database of overlapping TGR & comet results? • Can the comet assay be an alternative to the TGR, even for gene mutagens and mutagenic carcinogens?	**Aneugens WG (continued if needed)** **In vitro WG (continued if needed)**

9th **14.00-18.00** **(continued)**		• Are site of contact tissues needed in addition to the liver for the in vivo comet assay when combined with bone marrow MN? • If so, is there a need to include glandular stomach as well as duodenum for site-of-contact in the comet assay with orally dosed substances? • What is "adequate exposure" and the proper route of exposure (i.p. vs oral or inhalation) for bone marrow MN test acceptability? • Are certain tissues or routes of exposure preferable, particularly for the in vivo MN test? • Is the i.p. route considered preferable to the normal route of human exposure (oral, inhalation, dermal) because it minimizes first pass metabolism in the liver? • Is demonstration of exposure in the plasma sufficient to ensure exposure of the bone marrow in a micronucleus test? • What is considered "insufficient" bone marrow exposure that might lead to a requirement to perform a site-of-contact comet assay instead of a bone marrow MN test? • What is the state of validation of the MN assay in alternative tissues (i.e. liver, G.I. tract)? • Where does the Pig-a assay fit into regulatory in vivo testing?	

10th **09.00-12.00**		**In vivo WG (continued)**	**To be decided (any unfinished WGs)**
10th **13.30-16.45** **16.45-17.45** **17.45-18.00**	**A Plenary Symposium, led by Carole Yauk, Canada, will discuss the state-of-the-science, current application and added-value of high- dimensional data in genetic toxicology testing. Four presentations will review current high-dimensional assays in genetic toxicology:** • Adductomics – Yukari Totsuka, National Cancer Center, Japan • Whole genome transcriptional profiling - Jos Kleinjans, Maastricht University, the Netherlands • Single-molecule sequencing for mutation detection - Jason Bielas, Fred Hutchinson Cancer Research Center, USA • High-content phenotype-based assays - Ann Doherty, AstraZeneca, United Kingdom Presentations will be followed by a discussion of the strengths, weaknesses, opportunities and threats of each technology. **Feedback from all WGs (10 mins each)** **Closing**		