MONDAY 12 <sup>th</sup> April 2021 Morning			
Continuing Education Programme			
COVID-19 repurposing therapies and vaccines: The evolution of rapid toxicological assessment and regulation Chair: Dr Amy Chadwick			
09:30 - 10:00	An overview of the strategy of repurposing therapies for COVID		
05.50 10.00	Prof John Overington (Medicines Discovery Catapult)		
	Harnessing knowledge of antiviral pharmacokinetics and pharmacodynamics to rationalise candidates for SARS-		
10:00 - 10:30	CoV-2		
	Prof Andrew Owen (The University of Liverpool)		
10:30 - 11:00	Refreshments		
11.00 11.20	Design and regulatory requirements for GLP toxicity studies to support vaccine clinical development		
11:00 – 11:30	Dr Lawrence Segal (CEPI)		
11:30 - 12:00	Perspectives on how regulators and drug developers have worked together to expedite the approval process		
11.50 - 12:00	Dr David Jones (MHRA)		
12.00	End of Programme		

MONDAY 12 <sup>th</sup> April 2021 Afternoon				
Congress Programme				
12:45 – 12:58	Congress Welcome BTS President: Professor Shirley Price (University of Surrey)			
12:58 – 13:58	<b>Plenary Lecture:</b> The TeGenero Story – There and Back Again <b>Dr Richard Stebbings</b> (AstraZeneca) <i>Chair: Prof Shirley Price</i>			
14:00 - 15:00	BTS AGM			
15:00 - 15:30	Refreshment Break			
	Symposium 1: Experimental data and uncertainty modelling Chairs: Dr Paul Russell [Supported by RSC Toxicology Group]	Symposium 2: Chemical Weapons: Approach with caution Chairs: Dr James Coulson [Hosted by Human & Clinical Toxicology Section]		
15:30 - 16:00	Characterising uncertainty within <i>in vitro</i> models for safety assessment in early drug discovery <b>Dr Delyan Ivanov</b> (AstraZeneca, UK)	Clinical aspects of chemical weapons <b>Dr John Thompson</b> (Cardiff & Vale University Health Board)		
16:00 – 16:30	Integration of experimental data into skin allergy modelling <b>Dr Gavin Maxwell</b> (Unilever, UK)	Chemical weapons: mechanisms in toxicology <b>Prof. Horst Thiermann</b> (Inst Pharm and Tox, Munich)		
16:30 - 17:00	Determining points of departure from multivariate experimental data <b>Dr Imran Shah</b> (EPA, North Carolina, USA)	Nerve Agents: Old Challenges and Recent Developments <b>Dr Steve Emmett</b> (DSTL, UK)		
17:00 – 17:15	Oral Communication: In silico screening for endocrine disruption hazard identification Dr Elena Fioravanzo	<u>Oral Communication</u> : Osmolality and Anion Gaps in Organophosphorus Insecticide Self-Poisoning <b>Mr Jeevan Dhanarisi</b>		
17:15 – 17:45	Symposia Reflection and Discussion	Symposia Reflection and Discussion		
17:45	Close of Day			

TUESDAY 13 <sup>th</sup> April 2021 Morning		
Interactive Workshop		
10:30 - 11:30	The toxic art of public engagement and outreach	
	Dr Steve Cross (Wellcome Trust Engagement Fellow)	
	<b>Chair</b> : Dr Fiona Sewell	
11:30	End of Programme	

TUESDAY 13 <sup>th</sup> April 2021 Afternoon			
Congress Programme			
12:45 – 13:45	Paton Prize Lecture: Xenobiotic metabolism, cytochrome P450, microsomes, peroxisomes, nuclear receptors and rodent liver tumours: the scientific adventures of an old dinosaur Professor Brian Lake (University of Surrey) Chair: Prof Shirley Price (University of Surrey)		
	Symposium 3: Dose response concerns for in vivo test guidelines: Current human health regulatory needs Chair: Dr Miriam Jacobs [Hosted by Regulatory Toxicology Section]	Symposium 4: Application of big data and systems toxicology to drug and chemical safety evaluation Chairs: Dr Carolin Schramm & Dr Muireann Coen [Hosted by Mech. & Disc Toxicology Section]	
13:47 – 14:17	Regulating human safety: How dose selection in toxicity studies impacts human health hazard assessment and subsequent risk management options <b>Marjolijn Woutersen</b> RIVM	Utilising systems modelling and omics–driven data to derive adverse outcomes <b>Prof Roland Grafström</b> , (Karolinska Inst., Sweden)	
14:17 – 14:47	Hazard assessment needs for adequate worker health protection <b>Martin Phillips</b> (US EPA)	A multi-omics approach to elucidate the molecular sequelae of Indisulam treatment in neuroblastoma. <b>Prof Hector Keun</b> (Imperial College, London)	
14:47 - 15:00	Refreshments Break		
15:00 – 15:30	Kinetically Derived Maximum Dose Concept to Refine Risk Assessment: Opportunities and Challenges: report on HESI KMD workshop 2020 Michelle Embry (HESI)	Current perspective on the use of omics in compound safety evaluation <b>Dr Heidrun Ellinger-Ziegelbauer</b> (Bayer, Germany)	
15:30 – 15:45	Industry considerations for Guidance on Dose Level Selection for Repeat Dose oral Toxicity Studies <b>Dick Lewis</b> (Syngenta)	Oral Communication: Relating early cellular events to Drug-Induced Liver Injury (DILI) using time- resolved transcriptomic and histopathology data Anika Liu	
15:45 – 16:15	Symposia Reflection & Discussion Session	Symposia Reflection & Discussion Session	
16:17 – 17:02	BTS Network for Early-Stage Toxicologists (BTS-NEST) Invitation Lecture: Computational toxicology for risk assessment – linking <i>in silico</i> predictions to adverse outcomes Dr Tim Allen (Cambridge University) Chair: Dr David Mason (Unilever)		
17:02	Close of Day		

WEDNESDAY 14 <sup>th</sup> April 2021 Afternoon				
Congress Programme				
12:45 – 13:45	Barnes Prize Lecture: Title TBC Dr Bette Meek (University of Ottawa) Chair: Prof Shirley Price (University of Surrey)			
	BTS Selected Short Oral Communications Chairs: Dr Sarah Judge	BTS Selected Short Oral Communications Chairs: Prof Marion MacFarlane		
13:47 – 14:02	Target Safety Assessments: Evaluation of the Toxicological Risk of Targeting Plasmepsins in the Treatment of Malaria <b>Dr Jane Barber</b>	Application of in vitro intestinal triple culture model for longer-term repeated nanomaterial exposure and toxicity assessment <b>Dr Victor Ude</b>		
14:02 – 14:17	Mitochondrial dysfunction as an off-target effect of antipsychotic drugs <b>Miss Rachel Hardy</b>	Characterising lung dosimetry and implications of aerosol form in early preclinical development of inhaled drugs - overview of an industry-based PhD project Dr Graham Paul		
14:17 - 14:32	Demographics of poisonings from records of a poison information centre in a tertiary level centre of central India: A one-year retrospective analysis. <b>Dr Mrinal Patnaik</b>	Long-Fibre Carbon Nanotubes Induce Sporadic Pleura Mesothelioma Recapitulating Human Disease: a role for Epigenetic Mechanisms in Disease Development Dr Joaquin Zacarias Cabeza		
14:32 – 14:45	Refreshment Break			
	<b>Symposium 5:</b> <b>The impact of air pollution upon human health</b> <b>Chair</b> : Dr Martin Clift (Swansea University) & Dr Rodger Duffin (University of Edinburgh)	Symposium 6: Collaborating to increase confidence in the application of non-animal approaches <i>Chair: Fiona Sewell</i> [Supported by NC3Rs]		
14:45 – 15:15	Coherence between epidemiological and experimental findings - the case of particulate matter <b>Prof. Flemming R. Cassee,</b> (RIVM/Utrecht University, NL) (Dutch Toxicology Society Invitation Lecture)	A novel combinatorial, invertebrate-based platform for a 3Rs approach to assessment of developmental and reproductive toxicity (DART) <b>Prof Alison Woollard</b> (University of Oxford)		
15:15 – 15:45	From Car to Coronary: the cardiovascular effects of diesel exhaust particles. <b>Dr Mark Miller</b> (University of Edinburgh, UK)	Defining chemical categories for read-across using omics-derived mechanistic evidence from an invertebrate model <b>Prof Mark Viant</b> (University of Birmingham)		
15:45 – 16:15	Ultrafiine particles - which metals matter Dr Rachel Smith (Public Health England, UK)	In vitro cross species prediction of kidney excretion: application to agrochemical safety assessment <b>Dr Colin Brown</b> (Newcells Biotech, UK) & <b>Dr Marco</b> <b>Corvaro</b> (Corteva, UK)		
16:15 – 16:30	Utility of in vivo stress reporter models as toxicity biomarkers to understand the consequences of environmental exposure at a mechanistic level <b>Dr Francisco Inesta</b>	The development of a 3D cell model using the HepG2 C3A cell line for genotoxicity studies <b>Mr Nicholas Coltman</b>		
16:30 – 17:00	Symposia Reflection and Discussion	Symposia Reflection and Discussion		
17:02 – 17:47	Early-Career Investigator Prize Lecture: TBC Dr James Thaventhiran Chair: Dr Lesley Reeve (Covance, UK)			
17:47	Close of Day			

THURSDAY 15 <sup>th</sup> April 2021		
13:00 - 13:45	Mid-Career Investigator Prize Lecture: 'Aligning the 3Rs and advancing toxicity testing' Dr Helen Prior (NC3Rs) Chair: Dr Jason Gill (Newcastle University, UK)	
13:47 – 14:02	Prizes and Awards Chair: Prof Shirley Price (University of Surrey)	
	Symposium 7: Policy engagement with Carbon Monoxide (CO): When wedding bells ring for toxicological research Chairs: Prof Shirley Price and Isabella Myers [Hosted by Risk Assessment Speciality Section] [Supported by the Gas Safety Trust]	Symposium 8: In Silico Toxicology – Data, Concepts, and Pitfalls Chairs: Dr Andreas Bender & Dr Darren Kidd [Hosted by Computational and in silico Toxicology Speciality Section] [Supported by IVTS]
14:05 – 14:35	Carbon Monoxide: The issue, policy and time for research <b>Prof Baroness Finlay</b> (Cardiff University & Chair, All Party Parliamentary CO Group; APPCOG) & <b>Mrs Isabella Myers</b> (Chair, All Party Parliamentary CO Medical Sub-Group, COMED) The effects of CO exposure on chick embryo development <b>Dr Mari Herigstad</b> (Sheffield Hallam University)	Computational toxicology – opportunities, pitfalls, and what to watch out for in model predictions <b>Dr Andreas Bender</b> (Uni Cambridge/AstraZeneca)
14:35 – 15:05	Finding blood protein biomarkers to diagnose CO poisoning Dr Chris Morris (Newcastle University) Issues in treating CO poisoning: ROS production and oxidative damage during CO-hypoxia and reoxygenation Dr Plamena R. Angelova (University College, London)	Integration of high throughput high content <i>in vitro</i> mechanistic understanding and computational approaches for chemical safety prediction. <b>Prof Bob van de Water</b> (University of Leiden, NL)
15:05 – 15:35	Investigating the neurological outcomes of CO exposure and the search for a therapeutic <b>Dr Robert Dickinson</b> (Imperial College, London) The eyes have it: Future research involving pupillometry as a potential diagnostic of low-level exposure to CO <b>Prof Rob Chilcott</b> (University of Hertfordshire)	Establishing standards for <i>in silico</i> toxicity prediction protocols. <b>Dr Glenn Myatt</b> (Leadscope, Inc. USA)
15:35 – 16:05	Future Directions in CO Research Adrian McConnell (Gas Safety Trust) Symposia Reflection and Discussion	Symposia Reflection and Discussion
16:07 - 16:20	Close of Congress BTS President: Prof Shirley Price (University of Surrey)	