



Practical Methods for *In Vitro* Toxicology

Sponsored By:

Institute for In Vitro Sciences

30 W. Watkins Mill Rd, Gaithersburg, MD 20878

Agenda for January 9-12th, 2017

Day 1 – January 9, 2017		1:00pm-7:00pm
1:00	Shuttle from the Marriott to IIVS	
1:15	Arrive at IIVS	
Gettysburg Room – Introduction to In Vitro Testing		
1:20-1:50	Orientation, Introduction, and Goals <i>Lindsay Krawiec, IIVS</i>	
1:50-2:30	Introduction to In Vitro Toxicology <i>Lindsay Krawiec, IIVS</i>	
2:30-3:00	Practical Approaches to Cell-Based Assay Design <i>Hans Raabe, IIVS</i>	
3:00-3:30	Importance of GLPs in the Laboratory <i>Amanda Ulrey, IIVS</i>	
3:30-3:45	Break	
3:45-4:15	Global Acceptance of Animal Alternatives <i>Erin Hill, IIVS</i>	
Gettysburg Room – Novel Technologies		
4:15-4:45	Organ-on-a-chip Technology <i>Anthony Saleh, Mimetas</i>	
4:45-5:15	Pragmatic Use of 3D Lung Models to Evaluate Exposure-induced Adverse Effects that May Contribute to Pulmonary Disease <i>Holger Behrsing, IIVS</i>	
Laboratory		
5:15-5:30	Laboratory Tour and Orientation <i>Victoria Diersen, IIVS</i>	
5:30-7:00	Happy Hour Reception hosted by IIVS – in the Atrium	
7:00	Shuttle to Marriott	

Day 2 – January 10, 2017		8:00am-4:30pm
8:00	Shuttle from Marriott to IIVS	
8:15	Arrive at IIVS	
Gettysburg Room – Skin Sensitization Test Methods		
8:20-9:05	Skin Sensitization: Overview, Regulatory Status & the KeratinoSens Assay Allison Hilberer, IIVS	
9:05-9:25	Introduction to h-CLAT assay Megan Lamm, IIVS	
9:25-10:05	Skin Sensitization: DPRA & PhotoDPRA Adele Miller, IIVS	
10:05-10:15	Break	
Gettysburg Room – Introduction to Phototoxicity Testing		
10:15-10:45	Neutral Red Uptake Phototoxicity Assay in Balb/c 3T3 Mouse Fibroblasts Allison Hilberer, IIVS	
10:45-11:15	Question and Answer & 3T3 Phototoxicity Video	
Laboratory		
11:15-11:30	Pipettor Review Megan Lamm, IIVS	
11:30-12:30	Neutral Red Uptake Phototoxicity Assay in Balb/c 3T3 Mouse Fibroblasts Devin Sheehan and Asha Shravanthi Pidathala, IIVS <ul style="list-style-type: none">Thawing/counting BALB/c 3T3 cells (demonstration)Seeding 3T3 cells in 96-well plates	
12:30-1:30	Catered Lunch	
1:30-3:00	Neutral Red Uptake Phototoxicity Assay in Balb/c 3T3 Mouse Fibroblasts <ul style="list-style-type: none">Dilution of test articles & Dosing of 96-well plate culturesUVA/Dark Exposure & Rinsing of 96-well plateAddition of Neutral Red & Reading of the plates	
3:00-3:15	Break	
Gettysburg Room – Cellular-Based Assays		
3:15-3:45	In Vitro Assays to Detect Live & Dead Cells: New Methods to Detect Cell Stress Events Leading to Toxicity Fangmiin Charlie Sheen, Promega	
3:45-4:30	3T3 Phototoxicity Data Analyses and Case Studies Allison Hilberer, IIVS (Lab Binder)	
4:30	Shuttle to Hotel Open evening – Enjoy shopping and dining at your convenience	

Day 3 – January 11, 2017		8:00-8:00pm
8:00	Shuttle from Marriott to IIVS	
8:15	Arrive at IIVS	
Gettysburg Room – Introduction to Dermal Test Methods		
8:20-8:50	Validated in vitro assays used for dermal safety assessment <i>Gertrude-Emilia Costin, IIVS</i>	
8:50-9:20	Reconstructed Skin Micronucleus Assay <i>Greg Mun, IIVS</i>	
9:20-9:50	Non-regulatory in vitro assays used for dermal safety and efficacy testing <i>Gertrude-Emilia Costin, IIVS</i>	
9:50-10:10	Question & Answers	
10:10-10:25	Break	
Laboratory		
10:30-12:00	Skin Irritation Test Protocol using MatTek EpiDerm™ Reconstructed Human Epidermis <i>Norah Sadowski, Rebecca Pham, and Brandan Nokes IIVS</i> <ul style="list-style-type: none">Placing 3-D tissue models into culture & Dosing of tissues	
12:00-1:00	Catered Lunch	
1:00-2:00	Skin Irritation Test Protocol using MatTek EpiDerm™ Reconstructed Human Epidermis <ul style="list-style-type: none">Rinsing and inspection of treated tissuesTransfer of tissues for 42-hour post-treatment expression incubationMTT reduction test and Freeze-Killed Tissue ControlsAddition of MTT	
2:00-2:30	Corrositex™ demonstration: <i>Rebecca Pham, IIVS</i> Corrosivity in 3-D construct demonstration: <i>Asha Shravanthi Pidathala, IIVS</i>	
2:30-3:30	Skin Irritation Test Protocol using MatTek EpiDerm™ Reconstructed Human Epidermis <ul style="list-style-type: none">Transfer tissues to isopropanol to begin MTT extraction & Read plates	
3:30-3:45	Break	
Gettysburg Room – Case Study		
3:45-4:30	Skin Irritation Test Case Studies: <i>Nathan Wilt, IIVS</i> (Lab Binder)	
4:30-4:45	Shuttle to Marriott	
6:15-6:30	Shuttle to dinner hosted by IIVS	
6:30-8:00	Dinner at Il Porto – 245 Muddy Branch Road Gaithersburg, MD 20878	
8:00	Shuttle back to Marriott	

Day 4 – January 12, 2017		8:00am-4:30pm
8:00	Shuttle from Marriott to IIVS	
8:15	Arrive at IIVS	
Gettysburg Room - Introduction to In Vitro Ocular Irritation Testing		
8:20-9:05	Ocular Irritation Testing Methods: BCOP Assay & Histology <i>Allison Hilberer, IIVS</i>	
9:05-9:35	Topical Application Assay Using the EpiOcular™ Model <i>Nathan Wilt, IIVS</i>	
9:35-10:05	Integrated Approaches to Testing and Assessment for Eye & Skin Endpoints <i>Hans Raabe, IIVS</i>	
10:05-10:15	Questions & Answers & BCOP video	
10:15-10:30	Break	
Laboratory		
10:30-11:30	Ocular Alternatives Laboratory (BCOP) <i>Nana Boakye, Adam Gamson and Timothy Herpel, IIVS</i> <ul style="list-style-type: none">Isolation & mounting of corneas and filling of chambersPre-incubation of corneas exposure of corneas to test agents	
11:30-12:30	Catered Lunch	
12:30-1:30	Ocular Alternatives Laboratory (BCOP) <ul style="list-style-type: none">Exposure of corneas to test agentsRinsing off test material from corneasPost Exposure	
1:30-1:45	Break	
1:45-2:30	Ocular Alternatives Laboratory (BCOP) <ul style="list-style-type: none">Measurements of opacity and fluorescein penetrationReading of plates and data interpretation	
Gettysburg Room – Case Study & Round Table Discussion		
2:30-3:00	BCOP Data Analysis and Case Study <i>Nathan Wilt, IIVS (Lab Binder)</i>	
3:00-3:30	Using In Vitro Methods in the Comprehensive Safety Assessment Process <i>John Harbell, JHarbell Consulting LLC</i>	
3:30-4:00	Course summary, open discussion, completion of the course evaluation, presentation of the certificates and close of workshop	
4:00-4:30	Break-Out Groups	
4:30	Departures	

Thank you to:

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&

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For generously providing

the Corrositex Kits