



Practical Methods for *In Vitro* Toxicology

Sponsored By:

Institute for In Vitro Sciences

30 W. Watkins Mill Rd, Gaithersburg, MD 20878

Agenda for January 16-19th, 2018

Day 1 – January 16, 2018		1:00pm-7:00pm
1:00	Shuttle from the Marriott to IIVS	
1:15	Arrive at IIVS	
Gettysburg Room – Introduction to <i>In Vitro</i> Testing		
1:20-1:30	Orientation, Introduction, and Goals <i>Amanda Ulrey, IIVS</i>	
1:30-2:00	Overview of In Vitro Testing Platforms and Future Directions <i>Hans Raabe, IIVS</i>	
2:00-2:30	GLPs for <i>In Vitro</i> Studies <i>Amanda Ulrey, IIVS</i>	
2:30-2:45	Toward Achieving Harmonization in Measurement Through an Interlaboratory Study (draft title) <i>John Elliott or Elijah J. Petersen, NIST (confirmed)</i>	
2:45-3:00	Break	
3:00-3:30	Integrated Approaches to Testing and Assessment (IATA) <i>Hans Raabe, IIVS</i>	
Gettysburg Room – Novel Technologies		
3:45-4:15	Human Tissue Models for Better Therapies: Organ-on-a Chip Technology <i>Anthony Saleh, Mimetas (confirmed)</i>	
4:15-4:45	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 17, 2018		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	In Vitro Assays to Detect Live & Dead Cells: New Methods to Detect Cell Stress Events Leading to Toxicity <i>Terry Riss, Promega (confirmed)</i>	
9:05-9:35	Skin Sensitization: Overview of Assays, ITS, AOP & the KeratinoSens Assay <i>Tinashe Ruwona, IIVS</i>	
9:35-10:00	Human Cell Line Activation Test and Direct Peptide Reactivity Assay for the Prediction of Skin Sensitizing Chemicals <i>Megan Lamm, IIVS</i>	
10:00-10:15	Questions and Break	
Gettysburg Room – Introduction to Phototoxicity Testing		
10:15-10:45	Neutral Red Uptake Phototoxicity Assay in Balb/c 3T3 Mouse Fibroblasts <i>Allison Hilberer, IIVS</i>	
10:45-11:15	Question and Answer & 3T3 Phototoxicity Video	
Laboratory		
11:15-11:30	Pipettor Review	
11:30-12:30	Neutral Red Uptake Phototoxicity Assay in Balb/c 3T3 Mouse Fibroblasts <ul style="list-style-type: none">Thawing/counting BALB/c 3T3 cells (demonstration)Seeding 3T3 cells in 96-well plates	
12:30-1:15	Catered Lunch	
1:15-2:45	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	
2:45-3:15	h-CLAT Demonstration	
Gettysburg Room – Cell-Based Assays		
3:15-3:45	Future Directions (draft title) <i>Tinashe Ruwona, IIVS</i>	
3:45-4:30	3T3 Phototoxicity Assay: Case Studies <i>Allison Hilberer, IIVS (Lab Binder)</i>	
4:30	Shuttle to Hotel Open evening – Enjoy shopping and dining at your convenience	

Day 3 – January 18, 2018		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 <i>In Vitro</i> Assays Used for Dermal Safety Assessment <i>Gertrude-Emilia Costin, IIVS</i>	
8:50-9:20	Reconstructed Skin Micronucleus Assay (RSMN) <i>Greg Mun, IIVS</i>	
9:20-9:50	Non-regulatory <i>In Vitro</i> 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 <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: Corrosivity in 3-D construct demonstration:	
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	3D RhE Case Studies: Skin Irritation & Corrosion <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 19, 2018		8:00am-3:30pm
8:00	Shuttle from Marriott to IIVS	
8:15	Arrive at IIVS	
Gettysburg Room - Introduction to <i>In Vitro</i> Ocular Irritation Testing		
8:20-9:05	Ocular Irritation Testing Methods: BCOP Assay <i>Allison Hilberer, IIVS</i>	
9:05-9:35	EpiOcular™ Assays: Protocols, Performance & Experience <i>Nathan Wilt, IIVS</i>	
9:35-9:40	Questions & Answers & BCOP video	
9:40-9:55	Break	
Laboratory		
10:00-11:00	Ocular Alternatives Laboratory (BCOP) <ul style="list-style-type: none">Isolation & mounting of corneas and filling of chambersPre-incubation of corneas exposure of corneas to test agents	
11:00-12:00	Catered Lunch	
12:00-1:00	Ocular Alternatives Laboratory (BCOP) <ul style="list-style-type: none">Exposure of corneas to test agentsRinsing off test material from corneasPost Exposure	
1:00-1:15	Break	
1:15-2:00	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		
2:00-2:30	BCOP Data Case Studies <i>Nathan Wilt, IIVS</i> (Lab Binder)	
2:30-3:00	Course summary, open discussion, completion of the course evaluation, presentation of the certificates and close of workshop	

Thank you to:
MatTek Corporation, Ashland, USA
*For generously providing Human
Reconstructed Epidermal Tissues*
&
In Vitro International, Inc., Irvine, USA
*For generously providing
the Corrositex Kits*

For Your Reference:

Hotel

Gaithersburg Marriott

9751 Washingtonian Blvd.

Gaithersburg, MD 20878

301-590-0044

Restaurant (for Dinner on Thu, Jan 18)

Il Porto

245 Muddy Branch Road

Gaithersburg, MD 20878