2016 IVAL Annual Workshop and Conference
IVAL Boston Hepatocyte Technology Center
389 Main Street, Suite 301 – 304, Malden MA, 02148 Tel: (781) 397-9300

2016 IVAL Annual Workshop and Conference:

Novel *In Vitro* ADMET Technologies for Drug Development

April 11th – 12th 2016 IVAL Annual Workshop: Hands-on workshop for *in vitro* test systems:

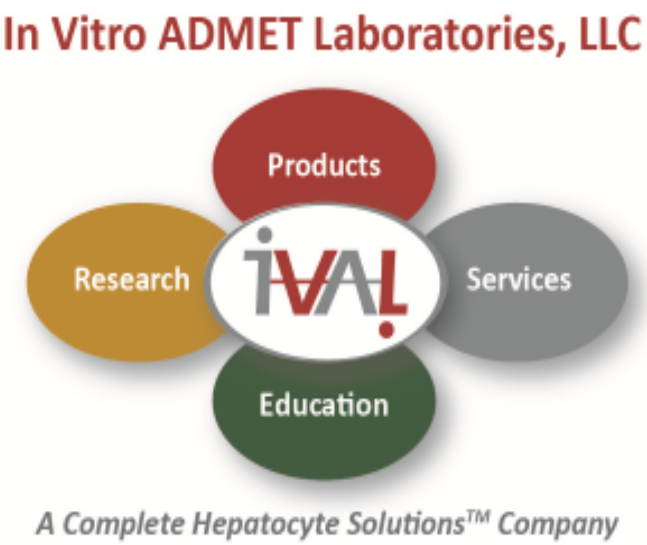
Working with Hepatocytes, enterocytes, and hepatocyte spheroids

April 12th 2016 IVAL Annual Conference: Novel In Vitro ADMET Technologies for Drug Development

Novel In Vitro *Hepatic and Enteric Technologies for Drug Development*

Workshop participants will receive hands-on training in human and animal hepatocyte handling techniques in both 2D and 3D culture models. For the first time, attendees will also use enterocytes and discover how to apply enteric metabolism as an experimental system.

Our conference is intended for scientists and professionals who are interested in an updated overview about the latest drug development techniques to improve accuracy and efficiency in predicting clinical outcome from preclinical assessments using a variety of *in vitro* tools. Our program offers compelling presentations from our experts and industry leaders.



Registration

General information

2016 IVAL Annual Workshop and Conference
IVAL Boston Hepatocyte Technology Center
389 Main Street, Suite 301 – 304, Malden MA, 02148 Tel: (781) 397-9300

Hands-on *In Vitro* ADMET Workshop:

Working with Hepatocytes, Hepatic Spheroids, and Enterocytes

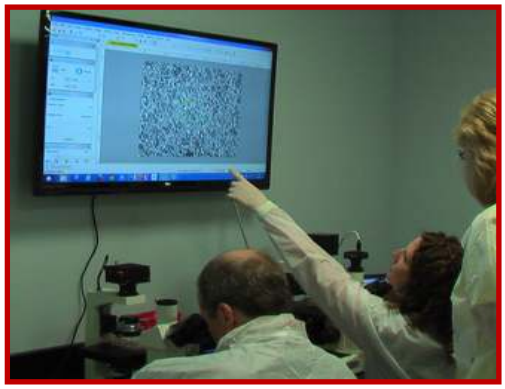
April 11th (full day) – April 12th (AM)

About the workshop

IVAL BHTC is committed to providing hands-on training on **in vitro ADMET technologies** to scientists from pharmaceutical industry, academia, and research institutions.

In this workshop, participants will learn laboratory techniques in the handling of cryopreserved animal and human hepatocytes, cryopreserved enterocytes, and hepatocyte spheroids.

The knowledge shared at our workshops has been rated top-notch by previous attendees.



Workshop participants review and discuss cell morphology and confluency from their plating exercise.

Workshop Agenda

Monday, April 11th, 9:00 AM – 4:30 PM

- ***Hepatocytes:***
  - *Thawing, counting, plating, and Matrigel overlaying of cryopreserved human and animal hepatocytes*
  - *Handling OnDemand™ pre-plated cryopreserved human hepatocytes*
- ***Enterocytes***
  - *Thawing, counting and plating of cryopreserved human and animal enterocytes for metabolism studies*
- ***Hepatocyte Spheroids (Hep-I-Spheres™)***
  - *Receiving and maintenance of Hep-I-Spheres™ cultures*
  - *Harvesting of Hep-I-Spheres™ for histology, RNA, and protein assays*
  - *Application of Hep-I-Spheres™ in hepatotoxicity studies*
- *Group discussion*

Tuesday, April 12th, 8:00 AM – 9:30 AM

- *Morphology evaluation of cultured hepatocytes and hepatocyte spheroid cultures*
- *Troubleshooting results*
- *Group discussion*

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2016 IVAL Annual Conference:
Novel In Vitro *Hepatic and Enteric Technologies for Drug Development*

April 12th: 10:00 AM – 5:30 PM
Reception to follow: 5:30 PM – 7:00 PM

A major challenge in drug development is clinical trial failure due to inaccurate preclinical assessment of human drug properties. In this conference, our internationally-renowned faculty will dissect the key factors contributing to the high cost of drug development, and discuss promising approaches to enhance the efficiency of drug development via accurate assessment of human ADMET drug properties.

Speakers

Albert P. Li, Ph.D.: Dr. Li is President and CEO of In Vitro ADMET Laboratories. He is a pioneer in human hepatocyte cryopreservation and is instrumental in the current routine application of cryopreserved hepatocytes in drug development. He has developed novel and practical experimental approaches with human hepatocytes for accurate assessment of human drug metabolism, drug-drug interactions, and drug toxicity. Dr. Li has recently pioneered the isolation and cryopreservation of human and animal enterocytes and the application of this novel experimental system to evaluate the metabolism and drug-drug/food-drug interactions of orally administered drugs. Dr. Li has published over 160 papers and co-edited 5 books in the areas of drug metabolism, drug-drug interactions, and toxicology.

Ayman El-Kattan, Ph.D.: Dr. Ayman El-Kattan is Associate Research Fellow at the Pharmacokinetics, Dynamics, and Metabolism Department, Pfizer Inc. Cambridge Laboratories. He earned his bachelor degree in pharmacy with distinction from University of Jordan and a Ph.D. in Basic Pharmaceutical Sciences at University of South Carolina. His main research interests are focused on understanding the role of transporters in influencing drug disposition and oral absorption. Also, it involves studying the utility of physiological based pharmacokinetic modeling (PBPK) tools in projecting drug disposition and drug-drug interaction liabilities in man for new molecular entities (NME). Dr. El-Kattan serves on the executive committee of the Drug Transporter focus group of the American Association of Pharmaceutical Scientists (AAPS). He has been invited speaker over 50 times at national and international conferences and meetings and has published over 100 papers in peer-reviewed Journals, book chapters and proceedings.

John (Jack) Vanden Heuvel, Ph.D.: Dr. Vanden Heuvel is one of Indigo Biosciences original founders, and currently serves as Chief Scientific Officer. Dr. Vanden Heuvel is a recognized expert in the field of nuclear receptor biology and toxicology with over 100 peer-reviewed publications. In addition to his role as CSO at INDIGO, Dr. Vanden Heuvel is a Professor at Penn State University where he is Program Coordinator of the undergraduate Toxicology Program, Co-Director of the Center of Excellence in Nutrigenomics and leads an extramurally funded research program.

Patrina Gunness, Ph.D.: Dr. Patrina Gunness currently serves as the Director, 3D biology at IVAL. She obtained her Ph.D. degree from the University of Toronto, Toronto, Canada, with specialization in Toxicology. She subsequently completed postdoctoral studies at Karolinska Institute, Stockholm Sweden, with research emphasis on the development and validation of novel 3D *in vitro* human hepatic cultures for toxicology studies. Dr. Gunness has several years of experience in the field of 3D Biology and its applications in investigative toxicology, has worked in Europe and North America and has had the privilege of working and collaborating with International Scientists from multidisciplinary fields. Dr. Gunness joined the IVAL team in August 2015 and is responsible for the development of IVAL's new 3D *in vitro* hepatocyte spheroid cultures for preclinical efficacy and safety studies.

Renee Sarno M.S.: Ms. Renee Sarno is a Discovery Scientist in Ironwood Pharmaceutical's DMPK group specializing in *in vitro* ADME characterization of novel compounds. She has a passion for designing, troubleshooting and executing state of the art assays to answer critical questions. Her focus is integration of ADME/PK data to minimize potential metabolism, transporter or P450 mediated drug-drug interactions.

Kan He, Ph.D.: Dr. Kan He is the President of Biotranex LLC, a science-driven contract research organization in New Jersey. Prior to establishing Biotranex, Dr. He served as President of UniTris Biopharma and Eternity Biosciences, and held scientific and managerial positions at Bristol-Myers Squibb, DuPont Pharmaceutical Co., and Warner-Lambert Co. Dr. He is an author on more than 50 scientific articles, numerous posters, and an inventor on 6 United States patents. Dr. He has made key contributions to the discovery and development of Eliquis (apixaban). He contributed to the discovery of several clinical development candidates and the development of Sprycel (dasatinib), Onglyza (saxagliptin) and Rezulin (troglitazone). Dr. He discovered bergamottin as the primary chemical constituent in grapefruit juice responsible for the mechanism-based inhibition of hepatic metabolism. Dr. He's current research interest is focused on the role that inhibition of BSEP and MDR-3 transporters play in understanding the underlying mechanisms of drug-induced liver injury (DILI).

Sumito Ito, Ph. D.: Dr. Sumito Ito is a Director of GenoMembrane Co., Ltd. He received his Ph.D. in Pharmacy from the University of Tokyo in 2013 under the guidance of Professors Sugiyama and Kusuhara. His work on MATE proteins is recognized as emerging important transporter in pharmacokinetics by International Transporter Consortium and PMDA. He has joined Transporter-Based Prediction of Drug Toxicity Laboratory, Joint Project with RIKEN Sugiyama's lab, as a Visiting Scientist from last April.

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Program

9:15 – 9:45 AM	**Arrive and Check in**	
9:45 AM	**Opening Remarks**	**Kirsten Amaral IVAL**
10:00 AM	**Is the Role of Intestine in Drug Disposition Overemphasized? Yes? Think Again!**	**Ayman El-Kattan Pfizer**
10:45 AM	**Cryopreserved Enterocytes for Drug Metabolism and Drug-Drug Interactions**	**Albert P. Li IVAL**
11:30 AM	**Hepatocyte Spheroids for Drug Metabolism and Hepatotoxicity Evaluation**	**Patrina Gunness IVAL**
12:15 PM	**Lunch (provided)**	
12:45 PM	**Nuclear Receptors and Control of Gene Expression in the Liver**	**Jack Vanden Heuvel Indigo Biosciences**
1:30 PM	**Uptake Transporter Assay with Plated Hepatocytes**	**Renee Sarno Ironwood Pharmaceuticals**
2:15 PM	**Stable and Transient Transfected Cell Lines for the Evaluation of Drug Transport**	**Sumito Ito Genomembrane**
3:00 PM	**Break**	
3:15 PM	**BSEP*cyte*™ and MDR3*cyte*™: Novel BSEP and MDR3 Inhibition Assays for Screening DILI Drugs**	**Kan He Biotranex**
4:00 PM	**Hepatocyte Assays for Drug Toxicity**	**Albert P. Li IVAL**
4:45 PM	**Round Table Discussion: Enterocytes and Hepatocytes**	
5:15 PM	**Reception**	

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Registration Selection and Fee Schedule

Check to select	Event options	Program rate	Total amount
	Boston- Hepatocyte Technology Conference: April 12th, 2016	$ 75.00	
	Hepatocyte Workshop: April 11th – 12th, 2016	$ 450.00	
	Boston- Hepatocyte Technology Conference and Hepatocyte Workshop: April 11th – 12th, 2016	$ 450.00	

Please complete and email to: nola@invitroadmet.com or Fax to: (410) 869-9034

A. Credit Card Information:
All fields are required and must be completed

American Express _____VISA _____MC_____

_____
Cardholder Name

_____
Cardholder Billing Address

_____
Cardholder Billing City

_____
Cardholder Billing State / Postal Code

_____
Cardholder Telephone Number

_____
Cardholder Email

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Card Number

_____
Expiration Date 3 or 4 Digit CVV

_____
Amount: U.S. Dollars

B. Registrant Information:
Please print your name as you wish it to appear on your badge

Dr._____ Mr._____ Ms._____

_____
Last Name First Name Middle Initial

_____
Job Title

_____
Company / Agency / Institution

_____
Address 1

_____
Address 2

_____
City / State / Postal Code

_____
Country

_____
Telephone Number Fax

_____
Email Address

_____
Any special dietary concerns to be considered for catered lunch (vegetarian, allergies, etc.)

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About In Vitro ADMET Laboratories, Inc.
In Vitro ADMET Laboratories, Inc. (IVAL) offers products and contract services that represent over three decades of expertise in the application of *in vitro* experimental systems to evaluate drug absorption, metabolism, drug-drug interactions and drug toxicity.
Based in Columbia, Maryland, and Malden, Massachusetts, IVAL seeks to enhance drug development efficiency through state-of-the-art contract research services. Our dedicated group of professionals have worked and collaborated with various government agencies and for small to big pharma both domestic and international. We aim to expedite the drug development process by providing innovative research techniques to get data to decision-makers fast. By partnering with our clients, we serve as an extension of their research arm to get tomorrow's solutions here today. Please visit our web site at www.invitroadmet.com.

General Information: The IVAL Boston Hepatocyte Training Center is conveniently located in downtown Malden Massachusetts, USA. The facility is within walking distance from the Massachusetts Bay Transportation Authority. www.mbta.com
Please reference the subway map to your right and take the Orange line to Malden Center.
When exiting the Malden Center station cross at the light at Commercial Street. This will put you directly in front of the Malden Government Center. As you face the building turn left, once past the building take your immediate right onto Pleasant Street (like you are walking behind the building). Please follow this to Main Street. Turn right onto Main Street. We are across the street at the "City Center" Building – 389 Main Street, 3rd floor, Malden, MA.

Parking: Paid parking is available across and to the left (as you face away from our building) at 180 Exchange Street, Malden MA 02148.

Parking Rates:
Per Hour: $ 2.00
Daily Rate: $ 18.00
Early Bird: $ 6.00 (entry before 9:00 AM, exit before7:00 PM)

Hotel Accommodations:
We recommend Hyatt Place Boston/Medford:
116 Riverside Avenue
Medford, Massachusetts, USA, 02155
Telephone: (781) 395-8500
Fax: (781) 395-0077

http://bostonmedford.place.hyatt.com/en/hotel/home.html
The hotel shuttle service to the T stops on an as-needed basis from 7:30 am- 9:00 pm each day.

Payment: Payment may be made by check or credit card. Email to nola@invitroadmet.com with remittance or Fax to: (410) 869-9034. Checks should be made in US dollars, payable to In Vitro ADMET Laboratories, Inc. Mail to: IVAL, Inc.; 9221 Rumsey Road, Suite # 8, Columbia, MD 21045, USA

Cancellation Policy: All cancellations are subjected to a $100.00 cancellation fee. Longer than 30 days, 100% refund (less cancellation fee). Less than 30 days, no refund but registration may be transferred to another person. All refund requests must be in writing. All refunds will be issued after the meeting has occurred. No refund requests will be accepted after April 8th, 2016. Please submit cancellation and refund requests, including transferring of registration to: Fax: (410) 869-9034; E-mail: nola@invitroadmet.com

Cancellation Deadline: April 8th, 2016

Academic/Government participants will receive a 50% discount.

Click here for a map of IVAL's Malden, MA facility.