

MatTek at the Society of Toxicology Meeting

Itinerary March 10-14

Poster titles in [blue](#) are MatTek-presented posters, and poster titles in [grey](#) are MatTek collaborations. We can't wait to see you there!

Saturday, March 10

Satellite Meeting: **Building a Better Epithelium: Breaking the Barrier to the Next Generation of Toxicity Testing**

Talk:

[Culturing the Largest Organ in a Dish: Skin Models for Toxicity and Efficacy Testing](#)

Speaker: Patrick Hayden

March 10, 2018 at 2:00 PM

Convention Center—Stars at Night Ballroom Foyer

Posters:

[Use of In Vitro Human Intestinal Microtissues as Relevant Models for Drug Permeation and Metabolism in the Gut \(Poster #7\)](#)

Presenting Author: Patrick Hayden

March 10, 2018 from 12:00 Noon to 2:00 PM

Convention Center—Stars at Night Ballroom Foyer

[The Role of Oxidative Stress in Dry Eye Disease: Investigations Using an In Vitro Organotypic Human Corneal Tissue Model \(EpiCorneal\) \(Poster #8\)](#)

Presenting Author: Patrick Hayden

March 10, 2018 from 12:00 Noon to 2:00 PM

Convention Center—Stars at Night Ballroom Foyer

[Pre-Validation of an Acute Inhalation Toxicity Assay Using the EpiAirway In Vitro Human Airway Model \(Poster #9\)](#)

Presenting Author: Patrick Hayden

March 10, 2018 from 12:00 Noon to 2:00 PM

Convention Center—Stars at Night Ballroom Foyer

Monday, March 12

Poster Session: Safety Assessment: Drug Discovery

[Permeability Screening of Drugs Using a Reproducible In Vitro 3D-Human Small Intestinal Tissue Model](#)

S. Ayehunie¹, T. Landry¹, Z. Stevens¹, J. Markus², M. Klausner¹, and P. Hayden¹. ¹MatTek Corporation, Ashland, MA; and ²MatTek In Vitro Life Science Laboratory, Bratislava, Slovakia.

Poster Board Number: P784 • Abstract Number: 1558

Displayed: 9:15 AM–4:30 PM • Author Attended: 1:30 PM–3:00 PM (Block C)

Tuesday, March 13

Poster Session: Emerging Technologies

Use of a 3D Full-Thickness Skin Equivalent and Mass Spectrometry Imaging for Evaluating Disposition of Topically Applied Drugs

M. Klausner¹, M. Bachelor¹, A. Armento¹, C. Walsh², E. Seeley², and H. Goodman². ¹MatTek Corporation, Ashland, MA; and ²Protea Biosciences, Morgantown, WV. Sponsor: P. Hayden.

Poster Board Number: P482 • Abstract Number: 2145

Displayed: 9:15 AM–4:30 PM • Author Attended: 3:00 PM–4:30 PM (Block D)

Poster Session: Alternatives to Mammalian Models I

Comparison of In Vitro Rat and Human Mucociliary Airway Models for Inhalation Toxicity Testing

P.J. Hayden¹, G.R. Jackson¹, A. Maione¹, C. Roper², and M. Klausner¹. ¹MatTek Corporation, Ashland, MA; and ²Charles River Laboratories, Edinburgh, United Kingdom.

Poster Board Number: P720 • Abstract Number: 2366

Displayed: 9:15 AM–4:30 PM • Author Attended: 1:30 PM–3:00 PM (Block C)

Detection of Reactive Chemicals and Oxidants Using an Organotypic Human Airway Model with Nrf2 Reporter Activity: Application to Evaluation of Tobacco Products

A. Maione, G.R. Jackson, O. O'Connell, J. Foisy, M. Klausner, and P.J. Hayden. MatTek Corporation, Ashland, MA.

Poster Board Number: P726 • Abstract Number: 2372

Displayed: 9:15 AM–4:30 PM • Author Attended: 1:30 PM–3:00 PM (Block C)

Detecting GI Toxicity Earlier Than in Dog: Developing an In Vitro Assay to Predict Clinical Diarrhea

M. Peters¹, H. Barthlow¹, C. Scott¹, A. Armento², and S. Ayehunie². ¹AstraZeneca, Waltham, MA; and ²MatTek, Ashland, MA.

Poster Board Number: P711 • Abstract Number: 2357

Displayed: 9:15 AM–4:30 PM • Author Attended: 1:30 PM–3:00 PM (Block C)

Development of a Cell-Based Approach to Assess the Pulmonary Fibrosis of Nanomaterials

G.M. Hilton¹, B. RothenRutishauser², H. Barsova², S. Chortarea², F. Zerimariam², M.J. Clift³, V. Stone⁴, P. Hayden⁵, A. Maione⁵, M. Sharma¹, and A.J. Clippinger¹. ¹PETA International Science Consortium Ltd, London, United Kingdom; ²Adolphe Merkle Institute, University of Fribourg, Fribourg, Switzerland; ³In Vitro Toxicology Group, Swansea University Medical School, Swansea, United Kingdom; ⁴HeriotWatt University, Edinburgh, United Kingdom; and ⁵MatTek Corporation, Ashland, MA.

Poster Board Number: P723 • Abstract Number: 2369

Displayed: 9:15 AM–4:30 PM • Author Attended: 1:30 PM–3:00 PM (Block C)

Poster Session: Epigenetics

Characterization of Whole Smoke and Smokeless Tobacco Exposure to a 3D Human Oral Tissue Model

B. Keyser¹, M. Bachelor², A. Maione², and W. Fields¹. ¹RAI Services Company, Winston-Salem, NC; and ²MatTek Inc., Ashland, MA.

Poster Board Number: P260 • Abstract Number: 1927

Displayed: 9:15 AM–4:30 PM • Author Attended: 3:00 PM–4:30 PM (Block D)

Wednesday, March 14

Talk:

Platform Session: Autoimmunity/Hypersensitivity/Inflammation

Wednesday, March 14 • 8:00 AM to 10:45 AM • CC Room 304

[In Vitro 3D-Human Small Intestinal Tissue to Study Ligand-Induced Acute and Chronic Inflammation in the Gastrointestinal Tract](#)

M. Klausner¹, T. Landry¹, Z. Stevens¹, J. Markus², P. Hayden¹, and S. Ayehunie¹. ¹MatTek Corporation, Ashland, MA; and ²MatTek In Vitro Life Science Laboratory, Bratislava, Slovakia.
9:55 AM-10:10 AM • Abstract Number 2649

Poster Session: Alternatives to Mammalian Models III: Liver, Ocular, and Skin

[Characterization of Drug Metabolizing Enzymes, Transporters, and Permeation in a Human Organotypic Corneal Tissue Model.](#)

Y. Kaluzhny, M. Kinuthia, T. Truong, A. Lapointe, P. Hayden, and M. Klausner. MatTek Corporation, Ashland, MA.
Poster Board Number: P794 • Abstract Number: 3161
Displayed: 9:15 AM–4:30 PM • Author Attended: 1:30 PM–3:00 PM (Block C)

[The Role of Oxidative Stress in Dry Eye Disease: Utilization of Human Organotypic Corneal Tissue Model.](#)

Y. Kaluzhny, M.W. Kinuthia, T. Truong, A. Lapointe, P. Hayden, and M. Klausner. MatTek Corporation, Ashland, MA.
Poster Board Number: P795 • Abstract Number: 3162
Displayed: 9:15 AM–4:30 PM • Author Attended: 1:30 PM–3:00 PM (Block C)

Poster Session: Respiratory Toxicology: Tobacco Products

The Use of Human 3D Reconstructed Bronchial Tissue to Study the Effects of Cigarette Smoke and E-Cigarette Aerosol on a Wide Range of Cellular Endpoints

L. Czekala¹, M. Stevenson¹, L. Simms¹, N. Tschierske¹, A. Maione², and T. Walele¹. ¹Imperial Tobacco Ltd, Bristol, United Kingdom; and ²MatTek Corp., Ashland, MA. Sponsor: F. Ayala-Fierro
Poster Board Number: P325 • Abstract Number: 2810
Displayed: 9:15 AM–4:30 PM • Author Attended: 10:45 AM–12:15 PM (Block B)