INFECTIOUS DISEASES WORLD SUMMIT

Includes three co-located conferences:

13th Vaccines Research & Development Conference
4th Influenza Research & Development Conference
12th Anti-Infectives Partnering & Deal-Making Conference

Keynote Speakers

Ripley Ballou
Head of Ebola Vaccine Research Unit
GlaxoSmithKline

Helen Boucher
Director, Infectious Diseases Fellowship Program
Tufts Medical Center

JULY 8-10, 2015 • BOSTON, MA

Gold Sponsor:
Viracor-IBT LABORATORIES

Silver Sponsor:
utmb Health
Sealy Center for Vaccine Development

Visit www.gtcbio.com for more information!
GTC is proud to present the Infectious Diseases World Summit, to be held in Boston, MA on July 8-10 2015. In recent years, the field of infectious diseases has faced repeated challenges, and areas such as pricing and reimbursement, regulatory, and the discovery of novel antibiotics have yet to be overcome. However, recent deals and the reemergence of big pharma in the space has signaled that the landscape of infectious diseases is shifting: why is there a renewed interest in this field? What will it mean for biotech companies, government agencies, and other players? This Summit seeks to highlight all stages of the field, from research and novel therapeutics, to commercialization aspects and market activity.

The Summit includes three concurrent conferences:

13th Vaccines Research & Development: All Things Considered - This event will discuss newly licensed vaccines, new vaccine technologies, and advances in hot topics such as RNA-based vaccines. In addition to scientific presentations and updates on research happening over the past year, colleagues will meet and connect in an accessible environment.

12th Anti-Infectives Partnering & Deal-Making - This conference will discuss and seek to answer questions such as, how can we better price antibiotics so that their value to society is better reflected and companies get a better ROI? What has caused the re-emergence of large pharmaceutical companies back into this space and how will that affect the other players?

4th Influenza Research & Development - This meeting seeks to create a forum to discuss emerging viruses such as H7N9 and MERS CoV, as well as updates on new breakthroughs in current viruses. Colleagues will discuss questions such as what is the role of the microbiome on influenza? Is finding a universal treatment for flu still relevant?

Our conferences are designed with our sponsors and exhibitors in mind: we create intimate and highly interactive environments so that they can maximize their reach and make long-lasting contacts. Our sponsors and exhibitors benefit from a few of the following:

- Sponsors/exhibitors have the option to receive the delegate list a week before and a week after the conference.
- The exhibit space for the meeting is shared with any other concurrent conferences, providing sponsors and exhibitors with access to a larger audience. The exhibit space is also where all networking functions take place, including coffee, snack stations, breakfast, and the evening reception.
- Your corporate logo will be placed on the cover page of the conference brochures, the USB proceedings given to all conference delegates, and on the presentation screen during all breaks to enhance your company’s visibility at the event. Your logo will also be placed on the conference website agenda linked to your website.

For sponsorship and exhibit opportunities, please contact:
Amber Kempf
Account Executive
amber.kempf@gtcbio.com
The faculty and staff of the Sealy Center for Vaccine Development strive to create, perfect, and promote the most effective and safest disease prevention strategies. In this effort, the center carries on the proud tradition of medical research and discovery that has been a hallmark of UTMB since its inception.
<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
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<tbody>
<tr>
<td>12:00</td>
<td>Registration</td>
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<tr>
<td>12:05</td>
<td>Welcome &amp; Opening Remarks</td>
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<tr>
<td>13:00</td>
<td><strong>Joint Session - Vaccines for the Developing World: Lessons Learned from the 2014 Ebola Outbreak</strong></td>
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<td><strong>Keynote Presentation - Twist and Turns: The Road to an Ebola Vaccine</strong></td>
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<td></td>
<td>Nancy Sullivan, Chief, Biodefense Research Section, NIH</td>
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<td><strong>Keynote Presentation - Accelerated Development of an Ebola Vaccine – What Went Well and What Could Have Gone Better</strong></td>
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<td></td>
<td>Ripley Ballou, VP and Head, Clinical Research and Translational Science, Vaccine Discovery and Development, GSK Vaccines</td>
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<tr>
<td>14:00</td>
<td><strong>Title TBA</strong></td>
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<td>Gene Olinger, High Containment Coordinator, National Institute of Allergy and Infectious Diseases (NIAID), NIH</td>
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<td></td>
<td><strong>Mechanisms of Immunity in Post-Exposure Vaccination against Ebola Virus Infection</strong></td>
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<td></td>
<td>Steven Bradfute, Research Assistant Professor, University of New Mexico</td>
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<tr>
<td>15:30</td>
<td>Afternoon Networking &amp; Coffee Break</td>
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<tr>
<td>16:30</td>
<td><strong>Joint Session - Vaccines for the Developing World (cont.)</strong></td>
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<td><strong>Protective Immunity against Malaria by Neutralization of Plasmodium-Encoded MIF</strong></td>
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<td>Richard Bucala, Professor of Medicine, Pathology, and Epidemiology &amp; Public Health, Yale University</td>
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<tr>
<td></td>
<td><strong>Title TBA</strong></td>
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<td></td>
<td>Steve Hoffman, CEO, Sanaria</td>
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<td><strong>Featured Presentation - Regulating Vaccines at the FDA: The Recent Experience</strong></td>
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<td>Doran Fink, Medical Officer, FDA/CBER</td>
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<tr>
<td>17:30</td>
<td>End of Day 1</td>
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<tr>
<td>07:00</td>
<td><strong>Registration &amp; Continental Breakfast</strong></td>
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<tr>
<td>07:55</td>
<td>Welcome &amp; Opening Remarks</td>
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<tr>
<td>08:00</td>
<td><strong>Plenary Session - Infectious Diseases: Where Are We and Where Are We Going?</strong></td>
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<td><strong>Infectious Diseases in Review 2014-2015 (Excluding HIV/AIDS)</strong></td>
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<td></td>
<td>Stephen H. Zinner, Charles S. Davidson Distinguished Professor of Medicine, Harvard Medical School, Mount Auburn Hospital</td>
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<tr>
<td></td>
<td><strong>Title TBA</strong></td>
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<tr>
<td></td>
<td>Helen Boucher, Director, Infectious Diseases Fellowship Program, Tufts Medical Center</td>
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<tr>
<td></td>
<td><strong>Title TBA</strong></td>
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<td></td>
<td>Harry Kleanthous, Associate Vice President, Head of Research, North America, Sanofi Pasteur</td>
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<tr>
<td>10:10</td>
<td>Morning Networking &amp; Refreshment Break</td>
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*All times are approximate and subject to changes without notice*
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<thead>
<tr>
<th>Time</th>
<th>Session I</th>
<th>Session II</th>
<th>Session III</th>
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<tbody>
<tr>
<td>10:45</td>
<td>Adjuvants</td>
<td>Development of Influenza Vaccines</td>
<td>Trends in the Anti-Infectives Marketplace</td>
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<td></td>
<td>and Immune Stimulators</td>
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<td>Panel Discussion: Diagnostics and Antibiotics</td>
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<tr>
<td>Lunch on Your Own</td>
<td>Anti-virals and Therapeutics</td>
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<tr>
<td>12:45</td>
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<td>New Government Initiatives and Non-Dilutive Funding</td>
<td>Panel Discussion: Partnering in Anti-Infectives: Best Practices and Lessons Learned</td>
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<tr>
<td>2:00</td>
<td>Immunotherapies</td>
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<td>3:40</td>
<td>Novel Approaches in RNA-Based Vaccines</td>
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<td>5:30</td>
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<td>Development of Influenza Vaccines (cont.)</td>
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<tr>
<th>Time</th>
<th>Session IV</th>
<th>Session V</th>
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<tbody>
<tr>
<td>8:00</td>
<td>Novel Vaccines and Technologies</td>
<td>New Delivery Systems</td>
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<tr>
<td>10:10</td>
<td>Developing a Universal Flu Vaccine</td>
<td>New Approaches to Regulatory</td>
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<tr>
<td>Lunch Provided by GTC</td>
<td>Panel Discussion: Regulatory Guidance and Overcoming Challenges in Anti-Infectives Development</td>
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All times are approximate and subject to changes without notice
JOINT SESSION SPEAKERS

Day 1: Plenary Session
Vaccines for the Developing World
Includes Special Topic: Lessons Learned from the 2014 Ebola Outbreak
*held jointly between Vaccines Research & Development Conference and Influenza Research & Development Conference

KEYNOTE SPEAKERS

Ripley Ballou
GSK Vaccines

Twist and Turns: The Road to an Ebola Vaccine

Nancy Sullivan
National Institutes of Health

FEATURED SPEAKER

Regulating Vaccines at the FDA: The Recent Experience

Doran Fink
FDA/CBER

DISTINGUISHED SPEAKERS & PANELISTS

Mechanisms of Immunity in Post-Exposure Vaccination against Ebola Virus Infection

Steven Bradfute
University of New Mexico

Panel Discussion: Challenges in Vaccines Development

Penny Heaton
The Bill and Melinda Gates Foundation

Protective Immunity against Malaria by Neutralization of Plasmodium-encoded MIF

Richard Bucala
Yale University

Session: Vaccines for the Developing World

SANARIA

Steve Hoffman
Sanaria

Day 2: Plenary Session
Infectious Diseases: Where Are We and Where Are We Going?
*held jointly between all three conferences in the Summit

DISTINGUISHED SPEAKERS & PANELISTS

Session: Infectious Diseases: Where Are We and Where Are We Going?

Helen Boucher
Tufts Medical Center

Infectious Diseases in Review 2014-2015 (Excluding HIV/AIDS)

Stephen H. Zinner
Mount Auburn Hospital

Harry Kleanthous
Sanofi Pasteur
13th Vaccines Research & Development Conference - July 8-10, 2015

KEYNOTE SPEAKER

Vaccine Adjuvant Science
Leonard Friedland
GSK Vaccines

FEATURED SPEAKER

A Replication Defective Human Cytomegalovirus (CMV) Vaccine
Tong-Ming Fu
Merck

DISTINGUISHED SPEAKERS & PANELISTS

Activation of CD8+ T Cells / Macrophages During Virus-Host Interactions
Sam Basta
Queen's University

New AG129 Mouse Models for Evaluation of Dengue Vaccines and Therapeutics
Nigel Bourne
University of Texas Medical Branch, Galveston

Session: Novel Vaccines and Technologies
Susan Ciotti
NanoBio

Reconsidering the BCG Vaccine: Potential New Roles in Autoimmunity and Atopy
Denise Faustman
Massachusetts General Hospital
Harvard Medical School

Session: New Delivery Systems
Andrew Geall
Novartis Vaccines and Diagnostics

Session: Novel Vaccines and Technologies
Novel Active/Passive Vaccines for Respiratory Syncytial Virus
Mike McCarthy
MedImmune

Immunotherapy of Cancer Using mRNA Vaccines
Steve Pascolo
University Hospital Zurich

RNAActive Technology for Potent Prophylactic Vaccines
Benjamin Petsch
CureVac

Session: Immunotherapies
DNA Immunotherapy for the Treatment of HPV Associated pre-Cancers and Cancers
Niranjan Sardesai
Inovio Pharmaceuticals

For an updated speaker list visit: www.gctbio.com/vaccines/speakers
DISTINGUISHED SPEAKERS & PANELISTS (cont.)

Pre-Clinical Evaluation of a Vaccine for the Treatment of Periodontal Disease
Jon Heinrichs
Sanofi Pasteur

Reposition of GM-CSF as a Novel Adjuvant for Therapeutic Vaccine to Treat Chronic HBV Infection
Bin Wang
Fudan University, Shanghai Medical College and National Engineering Lab for Therapeutic Vaccines

In Vitro-Transcribed mRNA for Immunotherapy
Katalin Kariko
BioNTech

Session: New Delivery Systems
David Weiner
University of Pennsylvania, Perlman School of Medicine

Session: New Delivery Systems
Samir Khleif
Georgia Regents University Cancer Center

Intradermal Delivery of a Complexed Nucleoside Modified mRNA Vaccine Results in High level T and B Cell Responses
Drew Weissman
University of Pennsylvania

The Essential Role of Macrophages in the Function of TLR-Based Adjuvants
Lee Wetzler
Boston University School of Medicine

For an updated speaker list visit: www.gtcbio.com/vaccines/speakers
DISTINGUISHED SPEAKERS & PANELISTS

M2SR: A Single Replication Next Generation Live Influenza Vaccine

Pamuk Bilsel
FluGen

Universal Flu Vaccines & Aging

Laura Haynes
UConn Center on Aging

Session: Innate Immunity and Infections

Christine Biron
Brown University

Tissue Resident Macrophages Are Critical for Regulating Immune Homeostasis During Influenza Infection

Kamal Khanna
University of Connecticut Health Center

Dendritic Cells in the Regulation of T Cell Responses to Influenza Virus

Thomas Braciale
University of Virginia School of Medicine

A Universal Influenza Virus Vaccine Strategy Based on the Conserved Stalk Domain of the Hemagglutinin

Florian Krammer
Mt. Sinai Hospital

Generation and Maintenance of Pulmonary TRM Cells

Linda Cauley
UConn Health

Session: Antivirals and Therapeutics

Kutub Mahmood
PATH

A Host-Targeted Approach to Prevent Influenza Using Engineered Receptor-Binding Proteins

Helen Connaris
University of St. Andrews

Innate Reactions When Influenza Virus Invades-From Protection to Excessive Responses That Cause Disease

Julie McAuley
University of Melbourne at the Peter Doherty Institute for Infection and Immunity

Viral Camouflage - Impact on Influenza Vaccine Efficacy?

Annie De Groot
EpiVax

Session: Development of Influenza Vaccines

Matthew J. Memoli
National Institute of Allergy and Infectious Diseases, NIH

For an updated speaker list visit: www.gtcbio.com/influenza/speakers
### DISTINGUISHED SPEAKERS & PANELISTS (cont.)

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<tr>
<th>Speaker</th>
<th>Affiliation</th>
<th>Topic</th>
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<tbody>
<tr>
<td>Tao Dong</td>
<td>Oxford University</td>
<td>Emanuele Montomoli</td>
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<td>University of Siena</td>
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<td></td>
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<td>The Impact of Host Genetic Variation and T Cell Responses on Influenza Virus Infection, and Disease Outcome</td>
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<td>Husni Elbahesh</td>
<td>University of Tennessee Health Science Center</td>
<td>Andrew Pekosz</td>
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<td>Johns Hopkins University, Bloomberg School of Public Health</td>
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<td>Influenza and Live Attenuated Influenza Vaccine Replication in Human Nasal Epithelial Cell Cultures</td>
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<td>Thomas Friedrich</td>
<td>University of Wisconsin</td>
<td>Sally Sarawar</td>
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<td>The Biochemical Research Institute of Southern California</td>
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<td>ADCC Antibodies in Heterosubtypic Immunity to Influenza</td>
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<td>Audray Harris</td>
<td>NIH</td>
<td>Tara Strutt</td>
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<td>University of Massachusetts Medical School</td>
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<td>Characterization of Influenza Virus Vaccine Immunogens by Electron Microscopy</td>
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<td>IL-2 Produced by Memory CD4 T Cells Synergizes with Influenza A Virus to Amplify Detrimental Lung Inflammation</td>
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For an updated speaker list visit: [www.gtcbio.com/influenza/speakers](http://www.gtcbio.com/influenza/speakers)
FEATURED SPEAKER

Overcoming the Challenges of Developing New Antibiotics for Resistant Bacteria

Barry Eisenstein
Merck

DISTINGUISHED SPEAKERS, PANELISTS AND MODERATORS

Panel Discussion: The Re-Emergence of Big Pharma in Anti-Infectives: Cause and Effect

Kevin Anderson
Genentech

Mike Dudley
The Medicines Company/Rempex Pharmaceuticals

Session: Antibiotic Valuation and Reimbursements

Michael Draper
Sanofi

Ann Eakin
DMID/NIAID/NIH

Panel Discussion: Partnering in Anti-Infectives: Best Practices and Lessons Learned

Carl Foster
Cempra Pharmaceuticals

Panel Discussion: Diagnostics and Antibiotics

Alita Miller
AstraZeneca

Panel Discussion: Diagnostics and Antibiotics

Nicole Mahoney
Cubist Pharmaceuticals

Session: Trends in the Anti-Infectives Marketplace

Speaker TBA
Matinas BioPharma

Reimbursement for Novel Antibiotics after FDA Approval: The Example of Delinkage

Kevin Outterson
Boston University

Session: Recent Deals & Advances in Anti-Infectives

Manos Perros
AstraZeneca

Regulatory Incentives for Drug Development: Do They Work?

Andrew Robertson
Merck

For an updated speaker list visit: www.gtcbio.com/anti-infectives/speakers
| Panel Discussion: New Perspectives and Approaches in Antibiotics Investment |
| Vishal Goyal |
| SR One |

| Panel Discussion: Diagnostics and Antibiotics |
| Thomas Lowery |
| T2 Biosystems |

| Panel Discussion: Partnering in Anti-Infectives: Best Practices and Lessons Learned |
| Jonathan Lourie |
| Duane Morris |

| Session: New Approaches to Regulatory |
| Anne Keane |
| Achaogen |

| Scientific Priorities for Antibiotic Discovery – Challenges and Opportunities |
| Carolyn Shore |
| The Pew Charitable Trusts |

| BARDA's Antibacterial Public Private Partnerships |
| Melissa Stundick |
| Biomedical Advanced Research and Development Authority (BARDA), DHHS |

| The Development of a Fluorocycline for Multidrug-Resistant Gram-Negative and Gram-Positive Aerobes and Anaerobes |
| Joyce Sutcliffe |
| Tetraphase Pharmaceuticals |

For an updated speaker list visit: www.gctbio.com/anti-infectives/speakers