Interact with fellow biotech leaders and trade ideas for tackling the biggest industry challenges, from preclinical research through pivotal trials and beyond!

FOUR PROGRAMMING TRACKS

† STRATEGIC DEAL-MAKING
- Reorient funding efforts in an uncertain IPO landscape
- Pioneer novel deal structures for today’s marketplace
- Identify M&A and licensing approaches that work

† IMPROVE R&D OUTCOMES
- Prioritize cost-effectiveness and value to ensure payoff for innovation
- Fine-tune partnerships and teams for clinical planning and trials
- Put patient engagement at the center of research

† CLINICAL RESEARCH OUTSOURCING & TECHNOLOGY
- Improve interactions with external partners through better planning and training
- Find the right partners and structure contracts more effectively
- Speed the transfer from preclinical research to clinical trials

† DIGITAL TECHNOLOGY AND REAL-WORLD EVIDENCE
- Put real-world evidence to work on new indications
- Tap novel medical devices and wearables for better clinical data
- Accelerate development with patient engagement and social media

To register, call 866-207-6528 or visit www.fiercedrugdevforum.com
WHO SHOULD ATTEND

This event is aimed at professionals in the pharmaceutical, biotech, medical device and venture capitalist fields responsible for:

› Business Development
› Corporate Development
› Mergers & Acquisitions
› Alliance Management
› Partnering
› Portfolio Management
› Vendor Management
› Licensing
› Clinical Operations
› Clinical Research / Clinical Development
› Strategy / Product Strategy / Strategic Development
› Clinical Trial Management
› Data Management
› Innovation
› Investments
› R&D
› Regulatory Affairs

This event is also of interest to:

› CROs
› Supply chain professionals
› Law firms
› Clinical data management specialists
› Business development specialists

Dear Colleague,

The biotech industry faces many serious strategic challenges with no obvious solution. The FDA approved only 22 new drug candidates in 2016 – less than half of the prior year, and the lowest level since 2010. Meanwhile, the IPO market collapsed to its lowest level since 2009, and pressure from the government and payers is pushing pricing and value concerns into earlier stages of drug development.

Biopharma companies must increasingly adopt creative dealmaking, new digital technologies and early cost-effectiveness strategies, all while speeding up the R&D process. This requires a novel way of thinking about partnerships and pipeline strategies, from the highest levels of biopharma leadership.

The 2nd annual FierceBiotech Drug Development Forum will draw together the industry’s executive decision-makers, to help guide your companies to success throughout the entire life cycle – both for products and for companies themselves. This year’s all-new agenda was built entirely from audience feedback, and offers you:

• Over 110 industry speakers, with >90% at the VP level or C-suite
• A three-day conference featuring four detailed learning tracks:
  › Strategic Deal-Making
  › Clinical Research Outsourcing and Technology
  › Improving R&D Outcomes
  › Digital Technology and Real-World Evidence
• Four long-format workshops offering deep dives into critical industry topics:
  › Accelerate Design of Adaptive Clinical Trials for Different Patient Populations
  › Encourage Growth of Partnerships Between Biotech and Academia
  › Make Meaningful Advances in a Hyper-Competitive Immuno-Oncology Market
  › Reduce the Failure Rate in CNS Trials by Managing Placebo Response
• Learning and networking opportunities with over 350 biotech industry leaders

This event gives biopharma leaders the skills to improve their partnership strategies with larger companies, financing sources and outsourced research partners. Our experienced and savvy executive-level speaking faculty will help you shape, select and pitch the best partnerships for drug development, while successfully navigating the financial and regulatory changes arising from a new administration. Target your learning opportunities toward four full-length tracks:

• STRATEGIC DEAL-MAKING: Develop novel deal structures, improve VC relationships, assess the M&A landscape and cope with a weak IPO market
• CLINICAL RESEARCH OUTSOURCING & TECHNOLOGY: Ensure success in highly partnered business models and move quickly from preclinical to clinical development, by streamlining relationships with your CROs
• IMPROVING R&D OUTCOMES: Step up R&D productivity through better patient engagement and recruiting, while demonstrating differentiation and value for demanding payers and physicians
• DIGITAL TECHNOLOGY & REAL-WORLD EVIDENCE: Use wearables, biomarkers and other technologies to accelerate clinical development and generate real-world evidence for the new health data ecosystem

On behalf of FierceBiotech and ExL Events, I invite you to join this unparalleled opportunity to work with your peers toward a quantum leap in drug development productivity and speed.

I look forward to seeing you in Boston this fall!

Sincerely,

Matt Greenbaum
Matt Greenbaum
Production Team Leader
ExL Events, a Division of Questex, LLC

Rebecca Williamson
Rebecca Williamson
Vice President, Life Sciences & Healthcare
FierceMarkets

To register, call 866-207-6528 or visit www.fiercedrugdevforum.com
Meet Your Drug Development Forum Speaking Faculty

Girish Aakalu, Vice President and Head, Global Scientific Affairs and Scientific Exchange, IPSEN
Michael Aberman, Vice President, Strategy and Investor Relations, REGENERON
Estuardo Aguilar, CEO, ADVANTAGENE
Chris Allen, Vice President, Head Counsel, US Litigation and Investigations, SHIRE
Richard Anders, Founder, MASS MEDICAL ANGELS
Saurabh Awasthi, Director, Pharmaceutical and Life Sciences R&D Advisory, PWC
Michael Bailey, CEO, AVELO ONCOLOGY
Roy Baynes, CMO, Senior Vice President, Head of Clinical Development, MERCK
Carl Berke, Partner, PARTNERS HEALTHCARE VENTURES
Nessan Bermingham, CEO, INTELLIA THERAPEUTICS
Kevin Bitterman, Partner, ATLAS VENTURES
Katrine Bosley, CEO, EDITAS MEDICINE
Richard Brand, CFO, BEYONDSPRING PHARMACEUTICALS
Steve Brannan, CMO, KARUNA PHARMACEUTICALS
Richard Brudnick, Executive Vice President, Business Development, BIOVARIANT
David Brush, Senior Director, Transactions, JOHNSON & JOHNSON
Christine Carberry, COO, KERYX BIOPHARMACEUTICALS
Jim Carroll, Vice President, Real World Evidence, Commercialisation & Outcomes, ICON
Martha Carter, Chief Regulatory Officer, ALBIREO PHARMA
Gail Cawkwell, CMO, PURDUE PHARMACEUTICALS
Jesse Cedarbaum, Vice President, Clinical Development, BIODEN
Jeremy Chadwick, Vice President and Head, Global Clinical Development Operations, SHIRE
Josh Cohen, CEO, AMLYX PHARMACEUTICALS
Laurence Cooper, CEO, ZIOPHARM
Mark Cooper, Of Counsel, FABER DAUERF & ITRATO PC
Jean-Marie Cuillerot, CMO, AGENUS
Kelley Dealhoy, Senior Advisor, Life Sciences M&A, DELOITTE LLP
Heather DeBenedetto, Vice President, Head of Therapeutic Operations, MODERNA THERAPEUTICS
Susan Dettmar, Principal, DELOITTE CONSULTING LLP
Shannon Devens, Executive Director, Clinical Operations, SURFACE ONCOLOGY
Steve Dickman, CEO, CBT ADVISORS
John Dougherty, Partner, HAUG PARTNERS LLP
Deborah Dunsire, CEO, XTUIT PHARMACEUTICALS
Neal Farber, CEO, NEUROHEALING PHARMACEUTICALS
Maria Fardis, CEO, IOVANCE BIOTHERAPEUTICS
Maurizio Fava, Director, Division of Clinical Research, MGH RESEARCH INSTITUTE
Mitchell Finer, CEO, ONCORUS
Greg Fiore, CMO, SYNEDGEN
Dennis Ford, CEO, LIFE SCIENCE NATION
Brian Gallagher, Partner, SR ONE
Karen Gardner, Senior Director, Clinical Development Operations, SEQIRUS
Bruce Goldsmith, COO, LYCERA
Angus Grant, Corporate Vice President, Business Development, CELGENE
Luba Greenwood, Vice President, Global Mergers, Acquisitions and Business Development, ROCHE
Richard Gregory, CSO, IMMUNOGEN
Jessica Grossman, CEO, MEDICINES360
Mike Hale, Vice President and Head of Biostatistics and Programming, SHIRE
Scott Harris, CMO, LYRIC PHARMACEUTICALS
Mary Lynne Hedley, COO, TESARO
Dana Hilt, CMO, LYSONOM THERAPEUTICS
Robert Hofmeister, CSO, TCR2 THERAPEUTICS
John Hohnke, President, Research and Development, FORMA THERAPEUTICS
Dan Housman, CTO, CONVERGEHEALTH by DELOITTE
Martin Huber, CMO, TESARO
Eva Jack, CBO, MERSANA THERAPEUTICS
Kenneth Kaitin, Director, TUFTS CENTER FOR THE STUDY OF DRUG DEVELOPMENT
Edward Kaye, CBO, SAREPTA THERAPEUTICS
Justin Klee, President, AMLYX PHARMACEUTICALS
Isaac Kohane, Chair, Department of Biomedical Informatics, HARVARD MEDICAL SCHOOL
William Korinek, CEO, ASTROCYTE PHARMACEUTICALS
Pablo Lapuerta, Executive Vice President and CMO, LEXICON PHARMACEUTICALS
John Lee, CMO, PHASEBIO PHARMACEUTICALS
Liz Lewis, Chief Counsel, Head of Patient Advocacy, TAKEDA
Manuel Litchman, CEO, MUSTANG BIO
Cheng Liu, CBO, EUREKA THERAPEUTICS
Casey Logan, CBO, TRACON PHARMACEUTICALS
Timothy Lowinger, CSO, MERSANA THERAPEUTICS
David Loynd, CEO, ENDRUX PHARMACEUTICALS
Krishna Menon, CBO and President of Research, CELLECTIX
Ramon Mohanlal, CMO, BEYONDSPRING PHARMACEUTICALS
Jodie Morrison, CEO, TOKAI PHARMACEUTICALS
Donald Morrissey, Managing Director, Head of Life Sciences, SRS ACQUIM
Rich Murray, CEO, JOUNCE THERAPEUTICS
Shakti Narayan, Vice President, Head of Transactions, JOHNSON & JOHNSON
Dawn Niccum, Director, Quality Assurance, INSEPTION GROUP
Sara Nochur, Senior Vice President, Regulatory Affairs, ALNYLAM PHARMACEUTICALS
Amit Rakhit, CMO, OVID THERAPEUTICS
Chandra Ramanathan, Vice President and Head, East Coast Innovation Center, BAYER
Rosemary Reilly, Partner, WILMER HALE
Lindsay Rosenwald, CEO, FORTRESS BIOTECH
Tehseen Salimi, Head of Medical Affairs - Primary Care and Women’s Health, MERCK
Rob Scott, CMO, ABBVIE
Shoshana Shendelman, CEO, APPLIED THERAPEUTICS
David Sherris, CEO, GENADAM THERAPEUTICS
Neal Simon, CEO, AZEVAN PHARMACEUTICALS
Ricky Sun, Principal, BAIN CAPITAL LIFE SCIENCES FUND
P.K. Tandon, Senior Vice President, Biometrics & Development Strategy, ULTRAGENYX
Steve Targum, CMO, FUNCTIONAL NEUROMODULATION
Charles Theuer, CEO, TRACON PHARMACEUTICALS
Nikola Trbovic, Senior Director, Head of R&D Technology Strategy, Worldwide Research & Development, PFIZER
Doug Treco, CEO, RA PHARMACEUTICALS
Nancy Valente, Vice President, Global Product Development, GENENTECH
Maria Vilenchik, CEO, FELICITEX THERAPEUTICS
Bridge Wagner, Director of Pancreatic Cell Biology, Chemical Biology Program, BROAD INSTITUTE
Sue Washen, CEO, APPLIED GENETIC TECHNOLOGIES CORPORATION
Keith Wilcoxen, Senior Director, Scientific R&D, TESARO
James Williams, Senior Director, Epidemiology, Value Based Medicine, BIODEN
Leslie Williams, CEO, IMMUSANT
Bryon Wornson, Vice President, Global Health and Value, PFIZER
Andrew Young, CBO, INTARICA THERAPEUTICS
Steven Zelekofskie, CMO, UNIQUE

To register, call 866-207-6528 or visit www.fiercedrugdevforum.com
**Monday, September 25, 2017 // WORKSHOP DAY**

<table>
<thead>
<tr>
<th>Time</th>
<th>Workshop A</th>
<th>Workshop B</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:00</td>
<td>Registration and Continental Breakfast</td>
<td></td>
</tr>
</tbody>
</table>
| 9:00   | **Accelerate Design of Adaptive Clinical Trials for Different Patient Populations**  
Recent success in biomarker development has made patient stratification in clinical trials a reality. But now with so many trial design options available, it can be a challenge to select the one best for your pipeline.  
• Generate usable data quickly and with as few trials as possible  
• Navigate pathways through FDA for breakthrough designation  
• Learn from successful early design case studies  
**Steven Zelenkofske, CMO, UNIQURE**  
**Martin Huber, CMO, TESARO**  
**P.K. Tandon, Senior Vice President, Biometrics & Development Strategy, ULTRAGENYX**  
**Scott Harris, CMO, LYRIC PHARMACEUTICALS**  
*This session contains a 30 minute networking break* | **Encourage Growth of Partnerships Between Biotech and Academia**  
Academic researchers often have more leeway for early research than industry will. By properly cultivating this, biotech companies can improve the likelihood of gaining access to successful new molecules.  
• Leverage braintrusts which are very deep in university environments by sharing authorship and manuscripts  
• Gain exposure to the granting and review functions  
• Synergistically turn research into real medicine  
**Bridget Wagner, Director of Pancreatic Cell Biology, Chemical Biology Program, BROAD INSTITUTE**  
**Carl Berke, Partner, PARTNERS HEALTHCARE VENTURES**  
*This session contains a 30 minute networking break* |
| 12:00  | Luncheon                                        |                                                |
| 1:00   | **Make Meaningful Advances in a Hyper-Competitive Immuno-oncology Market**  
Immunotherapies represent the next “blockbuster” sector, but with hundreds of candidates already being explored, some companies may take on inappropriate risk when trying to differentiate their candidates. Hone in on better ways to structure multi-armed trials, attract patients and secure regulatory approval.  
• Avoid irrationality in trial design resulting from attempts to be first to market  
• Beware of regulators growing tired of “wasting patients” on the latest PD1 investigation  
• Mix, match and add to multiple conventional therapies at once  
**Jean-Marie Cuillerot, CMO, AGENUS**  
**Mitchell Finer, CEO, ONCORUS**  
**Robert Hofmeister, CSO, TCR2 THERAPEUTICS**  
*This session contains a 30 minute networking break* | **Reduce the Failure Rate in CNS Trials by Managing Placebo Response**  
Drugs for neurological disorders are notoriously challenging in the clinic for many reasons, among them endpoint selection and the physiological obstacles faced by some patient populations and ages. Placebo response has been a major cause of trial failure, and new in-depth research has the potential to significantly mitigate this.  
• Outline why CNS trials are particularly prone to failure  
• Examine the challenges faced in trials for depression, schizophrenia and other indications  
• Select patients disproportionately likely to respond to placebo  
**Dana Hilt, CMO, LYSOSOMAL THERAPEUTICS**  
**Steve Brannan, CMO, KARUNA PHARMACEUTICALS**  
**Steve Targum, CMO, FUNCTIONAL NEUROMODULATION**  
**Maurizio Fava, Director, Division of Clinical Research, MGH RESEARCH INSTITUTE**  
*This session contains a 30 minute networking break* |
| 4:00   | Welcome Reception                               |                                                |
| 5:30   | Workshop Day Concludes                         |                                                |
Chart the Clearest Path to Drug Approval

- Spot trends in the new FDA commissioner’s previous commentary on the approvals process
- Outline new FDA initiatives to accelerate drug approval, with applications for orphan drugs, breakthrough designation and real world evidence
- Focus on challenges in NDAs, including new types of data, earlier-stage trials and small studies

**Moderator:** Arlene Weintrab, Contributing Writer, FIERCEBIOTECH

**Panelists:**
- Martha Carter, Chief Regulatory Officer, ALBIREO PHARMA
- Maria Fardis, CEO, IOVANCE BIOTHERAPEUTICS
- Charles Theuer, CEO, TRACON PHARMACEUTICALS

Industry Strategy on Drug Pricing: Making a Better Second Impression

- Prepare biopharma companies to face tremendous pricing pressure from payers, scrutiny from politicians and controversy in the public sphere
- Explore the ways pricing pressure effects innovation and R&D go/no-go decisions
- Assess whether biopharma can count on the U.S. market to fund global R&D going forward and discuss possible alternatives

**Moderator:** Carly Helfand, Senior Editor, FIERCEMARKETS

Fierce15 Veterans Panel: Lessons Learned on the Journey

- Learn from past Fierce15 winners who’ve transitioned from private to public
- Hear the how-tos of partnerships with larger drugmakers, manufacturers and more
- Share insights on working with investors and developing management teams

**Moderator:** Amirah Al Idrus, Writer, FIERCEVACCINES

**Panelists:**
- Mary Lynne Hedley, CEO, EDITAS MEDICINE
- NeSSAN Bermingham, CEO, INTELLIA THERAPEUTICS
- Jessica Grossman, CEO, IOVANCE BIOTHERAPEUTICS
- Shoshana Shendelman, CEO, RA PHARMACEUTICALS
- Rob Scott, CMO, ABBVIE
- Shoshana Shendelman, CEO, APPLIED THERAPEUTICS

Ensure that Innovative R&D Companies are Rewarded for Taking Risks

- Ensure that targets you prosecute will actually be difference-makers
- Evaluate the unmet medical need, its current economic and productivity burden and the economic benefit of the drug candidate in light of those figures
- Navigate potential failure points from a regulatory, cost and reimbursement point of view

**Moderator:** Arlene Weintrab, Contributing Writer, FIERCEBIOTECH

**Panelists:**
- Doug Treco, CEO, RA PHARMACEUTICALS
- Julie Notario, Senior Manager, Marketing Programs, FIERCEMARKETS
- Tracy Staton, Editor in Chief, FIERCEBIOTECH
- Nancy Valente, Vice President, Global Product Development, GENENTECH
- Edward Kaye, CEO, SAREPTA THERAPEUTICS
- Saurabh Awasthi, Director, Pharmaceutical and Life Sciences R&D Advisory, PWC
- Kenneth Kaitin, Director, TUFTS CENTER FOR THE STUDY OF DRUG DEVELOPMENT
- Byron Wornson, Vice President, Global Health and Value, PFIZER
- Mary Lynne Hedley, CEO, EDITAS MEDICINE
- NeSSAN Bermingham, CEO, INTELLIA THERAPEUTICS
- Jessica Grossman, CEO, IOVANCE BIOTHERAPEUTICS
- Shoshana Shendelman, CEO, APPLIED THERAPEUTICS
- Mary Lynne Hedley, CEO, EDITAS MEDICINE
- NeSSAN Bermingham, CEO, INTELLIA THERAPEUTICS
- Jessica Grossman, CEO, IOVANCE BIOTHERAPEUTICS
- Shoshana Shendelman, CEO, APPLIED THERAPEUTICS
- Mary Lynne Hedley, CEO, EDITAS MEDICINE
- NeSSAN Bermingham, CEO, INTELLIA THERAPEUTICS
- Jessica Grossman, CEO, IOVANCE BIOTHERAP...
<table>
<thead>
<tr>
<th>Time</th>
<th>Session Title</th>
<th>Panelists</th>
</tr>
</thead>
</table>
| 2:30  | Anticipate the Responses and Judgments of Venture Capitalists to a Crowded Market | Rosemary Reilly, Partner, WILMERHALE  
Luba Greenwood, Vice President, Global Mergers, Acquisitions and Business Development, ROCHE  
Eva Jack, CBQ, MERSANA THERAPEUTICS  
Brian Gallagher, Partner, SR ONE  
Ricky Sun, Principal, BAIN CAPITAL LIFE SCIENCES FUND |
| 3:15  | Enable Flexibility, Creativity and Independence in Partnerships Between Large and Small Biotech Companies | Carly Helfand, Associate Editor, FIERCEMARKETS  
Michael Bailey, CEO, AVEO ONCOLOGY  
Chandra Ramanathan, Vice President and Head, East Coast Innovation Center, BAYER  
Girish Aakalu, Vice President and Head, Global Scientific Affairs and Scientific Exchange, IPSEN  
Rich Murray, CEO, JOUNCE THERAPEUTICS  
Greg Fiore, CMO, SYNEDGEN  
Tehseen Salimi, Head of Medical Affairs - Primary Care and Women's Health, MERCK |
| 4:00  | Networking Break                                                             |                                                                          |
### Strategic Deal Making

**4:30**

**Avoid Desperation by Precision Expectations with Venture Capitalists**
- Demonstrate rigor of your reversal experiments, animal models, active comparators and placebo comparators
- Assemble a group of supporters who will make your VC partnership workable
- Collaboratively plan for the use of proceeds, experiments, controls, data generation and hiring
- Set yourself up for success by not waiting until new funds are urgently needed

**Neal Simon, CEO, Azevan Pharmaceuticals**

| 4:30 | Avoid Desperation by Precision Expectations with Venture Capitalists |
|      | - Demonstrate rigor of your reversal experiments, animal models, active comparators and placebo comparators |
|      | - Assemble a group of supporters who will make your VC partnership workable |
|      | - Collaboratively plan for the use of proceeds, experiments, controls, data generation and hiring |
|      | - Set yourself up for success by not waiting until new funds are urgently needed |

### Clinical Research Outsourcing and Technology

**5:15**

**Evaluate the Risks and Benefits of Deal Complexity: What Really Generates Value?**
- Address the pros and cons of co-development, co-promotion and co-commercialization deals
- Specify whether new milestones, promotional methods, complexity and time requirements add to or take away from the value proposition
- Prioritize the value to patients and the importance of reduced throughput time
- Protect each biotech’s full value in IPO while it is still meeting its milestones, royalties and co-promotion obligations

**Angus Grant, Corporate Vice President, Business Development, Celgene**

**Bruce Goldsmith, COO, Lycera**

| 5:15 | Evaluate the Risks and Benefits of Deal Complexity: What Really Generates Value? |
|      | - Address the pros and cons of co-development, co-promotion and co-commercialization deals |
|      | - Specify whether new milestones, promotional methods, complexity and time requirements add to or take away from the value proposition |
|      | - Prioritize the value to patients and the importance of reduced throughput time |
|      | - Protect each biotech’s full value in IPO while it is still meeting its milestones, royalties and co-promotion obligations |

### Improving R&D Outcomes

**Focus on Sponsor Accountability for CRO Oversight**
- Outline how successful partnerships between sponsors and CROs are formed
- Interpret new GCP guidelines when structuring sponsor accountability
- Clarify the characteristics of successful CRO partnerships

**Jodie Morrison, CEO, Tokai Pharmaceuticals**

**Dawn Niccum, Director, Quality Assurance, Inception Group**

**Shannon Devens, Executive Director, Clinical Operations, Surface Oncology**

| 5:15 | Evaluate the Prospective Match Between CROs and Sponsors |
|      | - Recruit SMEs to ask probing questions and determine if you are on the right track |
|      | - Gauge if the CRO is offering comfort in working style and interpersonal connections |
|      | - Quickly identify whether you are being assigned your preferred team |
|      | - Adapt to variations in quality and experience of team members |

| 6:00 | Cocktail Reception & Fierce15 Awards |
|      | 7:00 | Day One Concludes |

### Digital Technology and Real-World Evidence

**6:00**

**Prioritize Cost-Effectiveness for New Therapeutics**
- Aim at taking the cost out of manufacturing early
- Try to advance and get into clinic while thinking of the endgame at all times
- Mitigate risks and demonstrate reimbursement potential while working with a small team

**Leslie Williams, CEO, Immusant**

| 6:00 | Prioritize Cost-Effectiveness for New Therapeutics |
|      | - Aim at taking the cost out of manufacturing early |
|      | - Try to advance and get into clinic while thinking of the endgame at all times |
|      | - Mitigate risks and demonstrate reimbursement potential while working with a small team |

| 7:00 | Day One Concludes |

### Strategic Deal Making

**7:00**

**Steer Away from VC Investment that Will Never Be Relevant, Reimbursed or Provide Patient Value**
- De-emphasize digital health and app fads, in light of the lack of successful candidates even when pushed by the largest Silicon Valley tech firms
- Map out the impending need for clinical trials of new digital health assets that will require test conditions beyond what your digital infrastructure can realistically support
- Acknowledge that positive patient experience and engagement of exciting apps can still result in a product never adopted by physicians, never part of a medical workflow and never reimbursed

**Luba Greenwood, Vice President, Global Mergers, Acquisitions and Business Development, Roche**

| 7:00 | Steer Away from VC Investment that Will Never Be Relevant, Reimbursed or Provide Patient Value |
|      | - De-emphasize digital health and app fads, in light of the lack of successful candidates even when pushed by the largest Silicon Valley tech firms |
|      | - Map out the impending need for clinical trials of new digital health assets that will require test conditions beyond what your digital infrastructure can realistically support |
|      | - Acknowledge that positive patient experience and engagement of exciting apps can still result in a product never adopted by physicians, never part of a medical workflow and never reimbursed |

### Clinical Research Outsourcing and Technology

**Evaluate the Prospective Match Between CROs and Sponsors**
- Recruit SMEs to ask probing questions and determine if you are on the right track
- Gauge if the CRO is offering comfort in working style and interpersonal connections
- Quickly identify whether you are being assigned your preferred team
- Adapt to variations in quality and experience of team members

**Karen Gardner, Senior Director, Clinical Development Operations, Seqirus**

| 6:00 | Add Orphan Indications to Accelerate Development |
|      | - Target orphan drug indications to obtain extended periods of exclusivity for blockbuster therapeutics |
|      | - Anticipate changes now that politicians and payers expect this |
|      | - Weigh the prospect of changes to the orphan drug program, either legislatively or at the FDA regulatory level |

**Krishna Menon, CSO and President of Research, CellCeutix**

**John Lee, CMO, PhaseBio Pharmaceuticals**

| 6:00 | Add Orphan Indications to Accelerate Development |
|      | - Target orphan drug indications to obtain extended periods of exclusivity for blockbuster therapeutics |
|      | - Anticipate changes now that politicians and payers expect this |
|      | - Weigh the prospect of changes to the orphan drug program, either legislatively or at the FDA regulatory level |

### Improving R&D Outcomes

**Revolutionize Clinical Insight Through Proper Real-World Data Instrument Collection Design**
- Establish the most important measures of clinical results during doctor visits, then use them for repeated and reliable monitoring
- Account for patient demographics, feelings, preferences and cognitive ability
- Roll out digital collection tools for large-scale population initiatives

**Isaac Kohane, Chair, Department of Biomedical Informatics, Harvard Medical School**

| 7:00 | Revolutionize Clinical Insight Through Proper Real-World Data Instrument Collection Design |
|      | - Establish the most important measures of clinical results during doctor visits, then use them for repeated and reliable monitoring |
|      | - Account for patient demographics, feelings, preferences and cognitive ability |
|      | - Roll out digital collection tools for large-scale population initiatives |

To register, call 866-207-6528 or visit www.fiercedrugdevforum.com
### Secure Funding for Preclinical Companies

- Position company appropriately for financing
- Navigate a financing strategy
- Visualize advantages and disadvantages of investor-type financing

**Moderator:** David Sherris, CEO, GENADAM THERAPEUTICS

**Panelists:** Maria Vilenchik, CEO, FELICITEX THERAPEUTICS
Nikola Trbovic, Senior Director, Head of R&D Technology Strategy, Worldwide Research & Development, PFIZER
Carl Berke, Partner, PARTNERS HEALTHCARE VENTURES
Kevin Bitterman, Partner, ATLAS VENTURES
Dennis Ford, CEO, LIFE SCIENCENATION
Richard Anders, Founder, MASS MEDICAL ANGELS

### Shorten the Path from Preclinical to Clinical Phases

- Learn from large pharma and their expertise in advancing into the clinic
- Clarify strategies for bridging discovery and development
- Identify methods for advancing pipeline projects within targeted time frames

**Moderator:** Eric Palmer, Editor, FIERCEMARKETS

**Panelists:** John Hohneker, President, Research and Development, FORMA THERAPEUTICS
Sara Nochur, Senior Vice President, Regulatory Affairs, ALNYLAM PHARMACEUTICALS
Richard Gregory, CSO, IMMUNOGEN
Timothy Lowinger, CSO, MERSANA THERAPEUTICS

### Bridge the Cultural Divide Between Small Biotechs and Large CROs

- Recognize that CROs are incentivized to gain efficiency at scale by dividing staff sharply along functional roles which strongly differs from biotech start-up culture
- Align value with cost, given that there is no objective database for costs and that biotechs and CROs have very different incentives
- Agree on the depth and frequency of data verification and recognize when it is more appropriate to react to changes, amend protocols or start a new one

**Moderator:** Steve Dickman, CEO, CBT ADVISORS

**Panelists:** Richard Brudnick, Executive Vice President, Business Development, BIOVERTIV
Michael Aberman, Vice President, Strategy and Investor Relations, REGENERON
Lindsay Rosenwald, CEO, FORTRESS BIOTECH

### Prioritize and Evaluate Phase 4 Studies

- Learn how to develop a customer-focused medical blueprint as a basis for a medical research plan
- Demonstrate how post-approval clinical trials consistent with the approved label can add value for customers and the company
- Understand medical communication and promotional principles as part of the valuation framework for phase 4 research

**Gail Cawkwell, CMO, PURDUE PHARMACEUTICALS**

### Fine-Tune Partnerships for Rare Disease Clinical Trials

- Identify partners with the heft, infrastructure and commercialization experience that small biotechs typically lack
- Customize partnerships based on matching expertise and interest area
- Recognize that you cannot over-prepare for screening and enrolling sufficient patients to move through clinical development

**Pablo Lapuerta, Executive Vice President and CMO, LEXICON PHARMACEUTICALS**

### Capitalize on Upcoming FDA Initiatives to Tap New Sources of Trial Data

- Leap past shortcomings of registries and claims data to usable evidence
- Establish partnerships with tech players to prepare for bringing real-world data into the regulatory sphere
- Anticipate the concerns of regulators on data packages that incorporate alternative sources

**James Williams, Senior Director, Epidemiology, Value Based Medicine, BIOGEN**

---

To register, call 866-207-6528 or visit www.fiercedrugdevforum.com
<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Moderator/Panelists</th>
</tr>
</thead>
<tbody>
<tr>
<td>11:15</td>
<td>Highlight the Warning Signs of Failure in Strategic Partnerships</td>
<td>John Dougherty, Partner, HAUG PARTNERS LLP</td>
</tr>
<tr>
<td></td>
<td>Research, COO, KERYX BIOPHARMACEUTICALS</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Chris Allen, Vice President, Head Counsel, US Litigation and Investigations, SHIRE</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mark Cooper, Of Counsel, FABER DAEUFER &amp; ITRATO PC</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Donald Morrissey, Managing Director, Head of Life Sciences, SRS ACQUIOM</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Panelists: Kim Cooper, CEO, ZIOPHARM</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Cheng Liu, CEO, EUREKA THERAPEUTICS</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Manuel Litchman, CEO, MUSTANG BIO</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Keith Wilcoxen, Senior Director, Scientific R&amp;D, TESARO</td>
<td></td>
</tr>
<tr>
<td>12:00</td>
<td>Build the Deal – Don’t Buy It</td>
<td>David Brush, Senior Director, Transactions, JOHNSON &amp; JOHNSON</td>
</tr>
<tr>
<td></td>
<td>Explore the middle ground between licensing/M&amp;A and venture investment</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Compare and contrast the differing objectives of strategic and venture investments</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Foster organic growth at targeted smaller companies to build them into more appealing</td>
<td></td>
</tr>
<tr>
<td></td>
<td>buyout prospects</td>
<td></td>
</tr>
<tr>
<td>12:45</td>
<td>Networking Luncheon</td>
<td>Mike Hale, Vice President and Head of Biostatistics and Programming, SHIRE</td>
</tr>
<tr>
<td></td>
<td>Attract Informatics Talent and Resources Necessary for Patient Centricity and Personalized Medicine</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Identify your specific informatics needs and the technology expertise necessary</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Learn how to recruit informatics staffers with life sciences experience, partly by identifying PhD programs that emphasize computational skills</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Move beyond the company IT department to find tech-savvy scientific talent</td>
<td></td>
</tr>
</tbody>
</table>
**SPONSORSHIP & EXHIBIT OPPORTUNITIES**

Do you want to spread the word about your organization’s solutions and services to potential clients who will be attending this event?

Take advantage of the opportunity to exhibit, underwrite an educational session, host a networking event or distribute promotional items to attendees. ExL Events will work closely with you to customize a package that will suit all of your needs.

To learn more about these opportunities, please contact Andrew Sinetar at 212-400-6237 or asinetar@exlevents.com.

---

**Wednesday, September 27, 2017 // MAIN CONFERENCE, DAY TWO**

<table>
<thead>
<tr>
<th>Strategic Deal Making</th>
<th>Clinical Research Outsourcing and Technology</th>
<th>Improving R&amp;D Outcomes</th>
<th>Digital Technology and Real-World Evidence</th>
</tr>
</thead>
<tbody>
<tr>
<td>1:45</td>
<td>Achieve Commercial Success with Peptide Therapeutics for Chronic Diseases through Target Selection and Product Planning</td>
<td>Grasp Combination and Patient Engagement Approaches in Immuno-Oncology</td>
<td>Accelerate Drug Development through Improved Patient Engagement and Social Media Management</td>
</tr>
<tr>
<td><strong>Pioneer Novel Deal Structures in a Changing Marketplace</strong></td>
<td>• Strategically externalize assets with a deal structure that enables you to re-acquire it after they have reached proof of concept or other key milestones</td>
<td>• Reach out early to support awareness of clinical studies</td>
<td>• Engage patient organizations and support groups for consideration of trial design</td>
</tr>
<tr>
<td></td>
<td>• Leverage partner expertise while sharing both risks and costs</td>
<td>• Review multiple methods for attracting patient subjects</td>
<td>• Prevent social media from unbinding your trial</td>
</tr>
<tr>
<td></td>
<td>• Align financials and build trust to allow staged externalization to succeed</td>
<td><strong>Panelists:</strong> Amit Rakhit, CMO, OVID THERAPEUTICS and Liz Lewis, Chief Counsel, Head of Patient Advocacy, TAKEDA</td>
<td><strong>Moderator: Colin Foster,</strong> Managing Director, W2O GROUP</td>
</tr>
<tr>
<td></td>
<td><strong>Shakti Narayan, Vice President, Head of Transactions, JOHNSON &amp; JOHNSON</strong></td>
<td><strong>Estuardo Aguilar, CEO, ADVANTAGENE</strong></td>
<td><strong>Neal Farber, CEO, NEUROHEALING PHARMACEUTICALS</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Casey Logan, CBO, TRACON PHARMA</strong></td>
<td><strong>Fast-Track your Demonstration of Value During and After Clinical Trials</strong></td>
<td><strong>Compare Trends, Challenges and Development Paths for Repositioning Drugs</strong></td>
</tr>
<tr>
<td><strong>Unlock the Value of Indications that are of Incubatory Interest to Larger Pharma</strong></td>
<td>• Develop licensing interest in indications outside of pharma’s traditional “core” disease areas</td>
<td>• Review the repurposing of neurologically active drugs for new indications</td>
<td>• Review the repurposing of neurologically active drugs for new indications</td>
</tr>
<tr>
<td></td>
<td>• Manage the stop and go conversations through trial design, investment, clinical results, valuation inflection points and deal execution</td>
<td>• Describe the different insights, formulation, delivery and product profiles among repositioned product candidates</td>
<td>• Describe the different insights, formulation, delivery and product profiles among repositioned product candidates</td>
</tr>
<tr>
<td></td>
<td>• Compensate for asymmetrical information exchange between small and large companies</td>
<td>• Illustrate the contrasting risk attenuation features, IP strategies, market size, sale force, regulatory and financing issues involved</td>
<td>• Illustrate the contrasting risk attenuation features, IP strategies, market size, sale force, regulatory and financing issues involved</td>
</tr>
<tr>
<td></td>
<td><strong>David Loynd, CEO, ENDURX PHARMA</strong></td>
<td><strong>Build an economic model and early clinical value proposition</strong></td>
<td><strong>Prevent social media from unbinding your trial</strong></td>
</tr>
<tr>
<td></td>
<td><strong>William Korinek, CEO, ASTROCYTE PHARMACEUTICALS</strong></td>
<td>• Observe clinical trial data, which was generated for regulatory submission purposes, with a new focus on what it represents for value</td>
<td><strong>Engage patient organizations and support groups for consideration of trial design</strong></td>
</tr>
<tr>
<td><strong>2:30</strong></td>
<td><strong>Select and Strategize with CROs for Preclinical Research</strong></td>
<td>• Extrapolate ongoing clinical studies into value propositions</td>
<td><strong>Leverage partner expertise</strong></td>
</tr>
<tr>
<td></td>
<td>• Understand the value and risks of contract preclinical research</td>
<td>• Partner with customers at or after right after launch for research studies that generate real world evidence and demonstrate value</td>
<td><strong>Leverage partner expertise</strong></td>
</tr>
<tr>
<td></td>
<td>• Learn which capabilities you need to assemble, both internally and externally, and identify who has these capabilities</td>
<td>• Describe the different insights, formulation, delivery and product profiles among repositioned product candidates</td>
<td><strong>Leverage partner expertise</strong></td>
</tr>
<tr>
<td></td>
<td>• Establish and maintain good relationships with preclinical research partners</td>
<td>• Illustrate the contrasting risk attenuation features, IP strategies, market size, sale force, regulatory and financing issues involved</td>
<td><strong>Leverage partner expertise</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Josh Cohen, CEO, AMYLX PHARMACEUTICALS</strong></td>
<td><strong>Review multiple methods for attracting patient subjects</strong></td>
<td><strong>Leverage partner expertise</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Justin Klee, President, AMYLX PHARMACEUTICALS</strong></td>
<td>• Engage patient organizations and support groups for consideration of trial design</td>
<td><strong>Leverage partner expertise</strong></td>
</tr>
<tr>
<td><strong>3:15</strong></td>
<td><strong>Achieve Commercial Success with Peptide Therapeutics for Chronic Diseases through Target Selection and Product Planning</strong></td>
<td>• Clarify patient selection strategy through large multi-arm studies</td>
<td><strong>Leverage partner expertise</strong></td>
</tr>
<tr>
<td>Conference Concludes</td>
<td>• Balance the attractiveness of having a platform with great potential applications against the reality of having to pick the application most likely to secure FDA approval</td>
<td>• Pinpoint the ideal indication and label claims to seek</td>
<td><strong>Leverage partner expertise</strong></td>
</tr>
<tr>
<td></td>
<td>• Model the best means for acquiring resources and presenting your R&amp;D packages to larger pharma</td>
<td><strong>Josh Cohen, CEO, AMYLX PHARMACEUTICALS</strong></td>
<td><strong>Leverage partner expertise</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Fast-Track your Demonstration of Value During and After Clinical Trials</strong></td>
<td><strong>Leverage partner expertise</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Build an economic model and early clinical value proposition</td>
<td><strong>Leverage partner expertise</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Observe clinical trial data, which was generated for regulatory submission purposes, with a new focus on what it represents for value</td>
<td><strong>Leverage partner expertise</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Extrapolate ongoing clinical studies into value propositions</td>
<td><strong>Leverage partner expertise</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Partner with customers at or after right after launch for research studies that generate real world evidence and demonstrate value</td>
<td><strong>Leverage partner expertise</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Estuardo Aguilar, CEO, ADVANTAGENE</strong></td>
<td><strong>Leverage partner expertise</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Fast-Track your Demonstration of Value During and After Clinical Trials</strong></td>
<td><strong>Leverage partner expertise</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Build an economic model and early clinical value proposition</td>
<td><strong>Leverage partner expertise</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Observe clinical trial data, which was generated for regulatory submission purposes, with a new focus on what it represents for value</td>
<td><strong>Leverage partner expertise</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Extrapolate ongoing clinical studies into value propositions</td>
<td><strong>Leverage partner expertise</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Partner with customers at or after right after launch for research studies that generate real world evidence and demonstrate value</td>
<td><strong>Leverage partner expertise</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Estuardo Aguilar, CEO, ADVANTAGENE</strong></td>
<td><strong>Leverage partner expertise</strong></td>
</tr>
</tbody>
</table>

---

To register, call 866-207-6528 or visit www.fiercedrugdevforum.com
VENUE
Renaissance Boston Waterfront Hotel
606 Congress Street
Boston, MA 02210

If you require overnight accommodations, please contact the hotel. ExL has reserved a block of rooms at a discounted rate for ExL participants. To make reservations, please call 1-800-228-9290 or 617-338-4111 and request the negotiated rate for DDF 2017. The group rate is available until September 5. Please book your room early, as rooms available at this rate are limited.

*ExL Events, Inc. is not affiliated with exhibition Housing Management (EHM)/Exhibitors Housing Services (EHS) or any third-party booking agencies, housing bureaus, or travel and events companies. In the event that an outside party contacts you for any type of hotel or travel arrangements, please disregard these solicitations, and kindly email us at info@exlevents.com. ExL has not authorized these companies to contact you and we do not verify the legitimacy of the services or rates offered. Please book your guest rooms through ExL’s reserved guest room block using the details provided.

To register, call 866-207-6528 or visit www.fiercedrugdevforum.com
**Registration Information**

**How to Register:**

Phone: 866-207-6528  
Online: www.fiercedrugdevforum.com  
Email: registration@exlevents.com

**Registration Fees for attending the 2nd FierceBiotech Drug Development Forum:**

<table>
<thead>
<tr>
<th>Category</th>
<th>Fee</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pharma/Biotech – Conference Only</td>
<td>$1,995</td>
</tr>
<tr>
<td>Service Provider – Conference Only</td>
<td>$2,895</td>
</tr>
<tr>
<td>Academic – Conference Only</td>
<td>$1,195</td>
</tr>
</tbody>
</table>

Pre-Conference Workshops - Add on Pass: Choose from one AM and one PM Workshop — $300 each

**Group Discount Program**

**Save 25% per person when registering four**

For every three simultaneous registrations from your company, you will receive a fourth complimentary registration to the program (must register 4 at one time). This is a savings of 25% per person.

**Save 15% per person when registering three**

Can only send three? You can still save 15% off of every registration.

To find out more on how you can take advantage of these group discounts, please call 866-207-6528.

**Questions/Comments**

Do you have a question or comment that you would like to be addressed at this event? Would you like to get involved as a speaker or discussion leader?

Please contact Conference Production Director Matt Greenbaum at mgreenbaum@exlevents.com.

- YES! Register me for this conference!
- YES! Register me for Workshop A or B and Workshop C or D

Name: _________________________________ Title: _________________________________

Company: _________________________________ Dept.: _________________________________

Address: ___________________________________________________________________________

City: _________________________________ State: ___ Zip: _______

Email: _____________________________________________________________________________

Phone: __________________________________ Fax: ___________________________________

Please contact me:

- I'm interested in marketing opportunities at this event.
- I wish to receive email updates on ExL Pharma's upcoming events.

Method of Payment: ☐ Check  ☐ Credit Card

Make checks payable to ExL Events.

Card Type:

- ☐ MasterCard  ☐ Visa  ☐ Discover  ☐ AMEX

Card Number: _________________________________

Exp. Date: _________________________ CVV: _______

Name on Card: _________________________________

Signature: _________________________________

CONFERENCE CODE: C942

To register, call 866-207-6528 or visit www.fiercedrugdevforum.com
TERMS AND CONDITIONS: By registering for an ExL Events, Inc. (“ExL”) event, you agree to the following set of terms and conditions listed below.

REGISTRATION FEE: The fee includes the conference, all program materials, and designated continental breakfasts, lunches and refreshments.

PAYMENT: Make checks payable to ExL Events, Inc. and write C942 on your check. You may also use Visa, MasterCard, Discover or American Express. Payments must be received in full by the conference date. Any discount applied cannot be combined with any other offer and must be paid in full at the time of order. Parties must be employed by the same organization and register simultaneously to realize group discount pricing options.

**Please Note: There will be an administrative charge of $300 to substitute, exchange and/or replace attendance badges with a colleague within five business days of any ExL conference.**

CANCELLATION AND REFUND POLICY: If you cancel your registration for an upcoming ExL event, the following policies apply, derived from the Start Date of the event:

• Four weeks or more: A full refund (minus a $295 processing fee) or a voucher to another ExL event valid for 12 months from the voucher issue date.

• Less than four weeks: A voucher to another ExL event valid for 12 months from the voucher issue date.

• Five days or less: A voucher (minus a $395 processing and documentation fee) to another ExL event valid for 12 months from the voucher issue date.

To receive a refund or voucher, please email cancel@exlevents.com or fax your request to 888-221-6750.

CREDIT VOUCHERS: Credit vouchers are valid for 12 months from date of issue. Credit vouchers are valid toward one (1) ExL event of equal or lesser value. If the full amount of said voucher is not used at time of registration, any remaining balance is not applicable now or in the future. Once a credit voucher has been applied toward a future event, changes cannot be made. In the event of cancellation on the attendees’ behalf, the credit voucher will no longer be valid.

ExL Events, Inc. does not and is not obligated to provide a credit voucher to registered attendee(s) who do not attend the event they registered for unless written notice of intent to cancel is received and confirmed prior to the commencement of the event.

SUBSTITUTION CHARGES: There will be an administrative charge of $300 to substitute, exchange and/or replace attendee badges with a colleague occurring within five business days of the conference.

ExL Events reserves the right to cancel any conference it deems necessary and will not be responsible for airfare, hotel or any other expenses incurred by registrants.

ExL Events’ liability is limited to the conference registration fee in the event of a cancellation and does not include changes in program date, content, speakers and/or venue.

*The opinions of ExL’s conference speakers do not necessarily reflect those of the companies they represent, nor ExL Events, Inc.

Please Note: Speakers and agenda are subject to change without notice. In the event of a speaker cancellation, significant effort to find a suitable replacement will be made. The content in ExL slide presentations, including news, data, advertisements and other information, is provided by ExL’s designated speakers and is designed for informational purposes for its attendees. It is NOT INTENDED for purposes of copywriting or redistribution to other outlets without the express written permission of ExL’s designated speaking parties. Neither ExL nor its content providers and/or speakers and attendees shall be liable for any errors, inaccuracies or delays in content, or for any actions taken in reliance thereon. EXL EVENTS, INC. EXPRESSLY DISCLAIMS ALL WARRANTIES, EXPRESSED OR IMPLIED, AS TO THE ACCURACY OF ANY CONTENT PROVIDED, OR AS TO THE FITNESS OF THE INFORMATION FOR ANY PURPOSE. Although ExL makes reasonable efforts to obtain reliable content from third parties, ExL does not guarantee the accuracy of, or endorse the views or opinions given by any third-party content provider. ExL presentations may point to other websites that may be of interest to you, however ExL does not endorse or take responsibility for the content on such other sites.

Scenes from the Drug Development Forum 2016

To register, call 866-207-6528 or visit www.fiercedrugdevforum.com