

New Models of Industry Collaboration

With the relative success of product development partnerships and the growing number of push and pull incentive mechanisms in place, industry is increasingly receptive to collaborating with the public and non-profit sectors to pursue medical solutions for neglected diseases. Panelists discussed the different models they have been involved with, commented on issues that can arise and shared methods they have found to be successful.

Genzyme, one of the leading biotechnology companies, has recently formed several global health partnerships with academics and product development partnerships. A key challenge, according to James Geraghty, senior vice president at Genzyme, occurs when early stage work produces positive results. Given that “costs go up exponentially” as a product moves through development, Geraghty said questions arise about how to scale up operationally, how costs will be shared, and whether other partners step forward to help shoulder burden. He said the hope is that the “value of the science” will compel additional partners to support the effort.

Financing for product development is also a concern for R. Lee Douglas, a consultant and visiting scholar from the University of California at Berkeley. He is leading an effort where university researchers are taking advantage of a drug discovery platform created by the biotech company Cytokinetics. Using the platform, the researchers will seek new treatments for African sleeping sickness and leishmaniasis, a parasitic disease that affects the skin and can also damage internal organs. He has formed a non-profit organization that will hold the rights for any compounds developed from the partnership.

Douglas said the collaboration provides a good model for how a public-private consortium can use cutting edge technology developed by industry to discover new drug targets for neglected diseases. While Douglas is optimistic, he echoed Geraghty's concern about who will pay for the next stage: developing any drug candidates they discover into approved products. Douglas said it is a particularly confounding issue when one is dealing with a disease like leishmaniasis that mainly affects the “poorest of

the poor” and there is “no possibility of ever making money” from a treatment. In these instances, he said, the “heart of the problem is money, not the model.”

Robert Beall, president and CEO of the Cystic Fibrosis Foundation (CFF), has a different take on the financing hurdle. CFF, which has invested over \$300 million in public-private drug development projects, has developed a model that has been used successfully for cystic fibrosis. To see projects through to completion, he advised, a non-profit partner has to structure its collaborations “like a business, not like a charity.” An organization must commit enough resources so that its interests become a company priority. “You can't dabble,” he said.

Joshua Boger, president and CEO of Vertex Pharmaceuticals, which is in a drug development partnership with CFF, discussed the value of these partnerships to the company. He said, while he can't produce an Excel spread sheet that would predict a clear return on investment from its work with CFF, he is confident that “if you solve a major medical need, things will work out for you.”

Money is just one obstacle facing Alan Taggart, vice president of government project management at MedImmune, Inc., as he talks with governments around the world about increasing the global capacity for influenza vaccine production. A key dilemma they have encountered is how to deal with a disease that is a global problem when most countries tend to approach it as a national problem. He said individual governments “want us to take care of their own populations,” particularly when it comes to capacity for responding to pandemic influenza. But building manufacturing facilities country-by-country, he said, is not a viable model for preparing for a global pandemic.

According to Taggart, the challenge is how to get governments to work as a collective whole to come up with a model that can supply vaccines for 6 billion people on the planet: helping finance factories that manufacture vaccines for both paying countries and countries that can't afford it.

MODERATOR:

Robert Hecht, PhD
Senior VP, Public Policy
International AIDS Vaccine
Initiative

PANELISTS:

Joshua Boger, PhD
President and CEO
Vertex Pharmaceuticals

Robert J. Beall, PhD
President and CEO
Cystic Fibrosis Foundation
Therapeutics

R. Lee Douglas
Consultant and Visiting
Scholar
UC Berkeley

James A. Geraghty
Senior Vice President
Genzyme Corporation

Alan Taggart
Vice President, Government
Project Management
MedImmune, Inc.