



Office:
PO Box 30085 +1.513.252.2901
Cincinnati, OH 45230 Mobile:
USA +1.513.225.8765
Fax: +1.206.666.4856

The current western drug development process is labor and time intensive. It is also very risky. In the USA, the typical cost from development-to-market is \$2,600,000,000.00, takes at least 12 years, with only a 7% success rate.¹ This cost/risk model is frequently “used to explain why drug giants merge, and why they must charge high prices. The reality is somewhat different.”²

Open Therapeutics believes the pharma industry is poised to include a new business model – or be disrupted – and some are responding.³

In mid-2016, after spending 7-years of developing and attracting synthetic biology-based technologies, we are freely providing our therapeutic technologies to the global community in <http://OpenTherapeutics.net>.

Simplistically, we are doing for pharma what Red Hat® does for computing with Linux®. Why?

Other early adopting pharmaceutical firms crowd-sourcing open technologies to enhance their drug pipeline include Boehringer Ingelheim®, AstraZeneca®, and Sanofi®.^{4 5 6}

The recently announced NIH’s Open Science Prize, the White House’s call for Open Innovation, and Senator Coons’ *Crowdsourcing and Citizen Science Act of 2015* are additional forcing-factors.^{7 8 9} However, there is no end-to-end turnkey process to meet the demand.

OpenTherapeutics.net is an agnostic, accessible, and secure web platform. It hosts the freely available biopharma technologies and crowd-sources a collaborative interdisciplinary workflow process. One of those technologies is an analogue to Amgen®’s IMLYGIC®, which recently gained FDA approval.¹⁰

The platform manages a number of interconnected incentives. In addition to the free technologies, the Open Therapeutics hosts the entire scientific workflow process, from adopting the open technologies all the way through publishing collaborative results, and even commercialization. Adopters gain career-enhancing access to the highly published Innovators and Brands behind the open technologies. But that is not all!

¹ Tufts Center for the Study of Drug Development, http://csdd.tufts.edu/news/complete_story/pr_tufts_csdd_2014_cost_study, Tufts University, 18 Nov 2014.

² Billion-dollar babies, <http://www.economist.com/news/business/21679203-high-cost-rd-used-explain-why-drugs-giants-merge-and-why-they-must-charge>, 28 Nov 2015.

³ <http://www2.deloitte.com/us/en/pages/life-sciences-and-health-care/articles/biopharma-open-innovation.html>

⁴ www.boehringer-ingelheim.com/news/news_releases/press_releases/2015/21_september_2015_collaboration.html

⁵ www.reuters.com/article/2015/09/22/us-astrazeneca-cancer-idUSKCN0RM0MG20150922

⁶ http://en.sanofi.com/Nasdaq_OMX/local/press_releases/sanofi_and_astrazeneca_exchange_1967951_20-11-2015!08_00_00.aspx

⁷ www.nih.gov/news/health/oct2015/od-20.htm

⁸ <https://www.whitehouse.gov/blog/2015/10/22/building-momentum-open-innovation>

⁹ <http://coons.senate.gov/download/?id=063AEFE6-CB5C-42FD-8FD6-57F58BD1AC5B>

¹⁰ <http://www.amgen.com/media/news-releases/2015/10/fda-approves-imlygic-talimogene-laherparepvec-as-first-oncolytic-viral-therapy-in-the-us/>

A large cancer foundation recently agreed to issue a Request for Proposals (RFP) for \$150,000 of funding over two years to global researchers to incentivize the Adoption of the freely available viral oncolytic immunotherapy. That foundation has over 10,000 researchers in their RFP network.

Customers

Global customers for OpenTherapeutics.net, and their supported needs, examples include:

1. Pharmaceutical firms: market trends, product feedbacks, information, analytics, and recruitment,
2. Governments: targeting and allocating resources to disease trends,
3. Public health not-for-profits: healthcare delivery infrastructure needs,
4. Scientists and researchers: collaborations and publications,
5. Investors and Foundations: deal flow and targeted funding,
6. Education institutions: real-time science curriculum support; also faculty recruitment.

Value Proposition

Our team has over 150 years of synthetic biology, biopharma, and information technology experience (<http://microbialrobotics.com/team/>). Beyond supporting the needs of users of Open Therapeutics, values include:

1. Invigorating underused intellectual properties.
2. Data and Analytics: Gain scientific, market, and industry insights from global scientific community.
3. Increase the number of scientists able to participate in the drug discovery process. This will create new population and genetic data sets that will further inform drug development.
4. Manuscripts: Hosts an agnostic document development engine that intertwines a pre-Peer Review process. This encompasses all aspects, comments, and provenance of the final manuscript.
5. Economic development: Freely providing technologies to the scientific community may stimulate new entrepreneurial efforts that will further data sets and speed drugs to markets.

Summary: Open Therapeutics will crowd-source open technologies that generates data and information. This highly incentivized model serves to create micro-pharmaceutical industries within underserved markets. One might think of Open Therapeutics as the Facebook® for scientists.

Re-establishing Collaborative Science for the Therapeutic Industry with the “Honey Pot” Model

