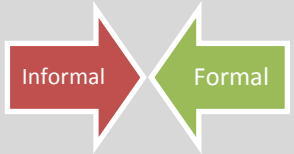
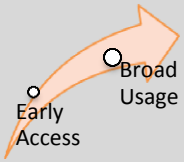
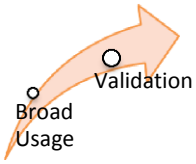
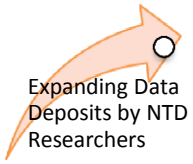
Open Source Drug Discovery Map

Understanding and Assessing the Value, Drivers, and Outcomes of Open Source Drug Discovery for Neglected Tropical Diseases

RESOURCE TYPE	DEPOSIT TYPE	REPOSITORY	MODEL OF OPENNESS	VALUATION	COLLABORATION POTENTIAL	HUMAN CAPACITY DEVELOPMENT
IDEAS, PUBLICATIONS	Notes, Results of Experiments, Working papers, Published Manuscripts, Other Literary Works	Literature Databases E.g. PLoS; Convergence is increasing between informal and formal databases.  	Open access with participant support **Drivers:**  	Deposits, Downloads, Citations, Blogs, Social Bookmarks, Community Ratings	Joint Research, Co-authorship	Networking and Co-Authorship Opportunity with NTD Researchers **Outcomes:**
STRUCTURED BIOLOGICAL/ CHEMICAL DATA	Genomic data, Proteomic data, Biological structural data, Chemical structural data, Pre-clinical data, NTD Prevalence Data	MalariaGen, CHeMBL, TDR Targets, OSDD, GNTD; The goal here should be linkages between databases to support analysis. DB=Database	Open access to data; Stipulations may exist regarding rights to IP generated from the data **Drivers:**  	Deposits, Downloads, Citations, Collaboration/ Partnership Formation, Research Program Formation	Queries/Partner Search via Collaboration Environments, Joint Research or Prevention Program Development	Educational Programs, Training (Analysis, Validation, Synthesis) Programs in Disease Endemic Countries **Outcomes:** 

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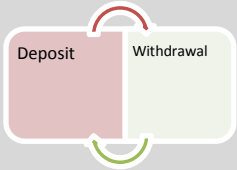
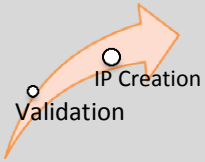
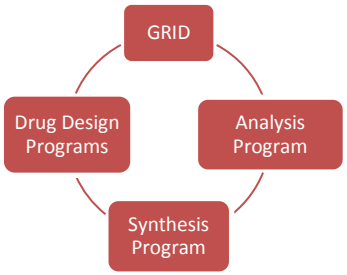
BIOLOGICAL/ CHEMICAL MATERIALS	Biological Materials, Reagents, Models, Chemical Compounds	Material, Reagent, Model Repositories E.g. MR4, ATCC; Users can engage in a cycle of deposit and withdrawal as discovery occurs.  	Material Transfer Agreements; Rights to use stipulations as determined by owners **Drivers:**  	Deposits, Withdrawals, Licenses, Partnership Formation	Joint Validation, Technology Transfer, Joint Product Development	Drug Design Programs in Disease Endemic Countries **Outcomes:**
TOOLS	Analytical software and Equipment	Technological GRIDS, Collaboration Tools, Open Access Laboratories E.g. D3, Leishmaniasis Network, WISDOM, OSDD, CDD, Praziquantel Project; Such tools have a direct connection to human capacity development.  	Open Access-Open Innovation **Drivers:** 	Collaboration/ Partnership Formation, Research Program Development, Education Program Development	GRID-Based Analysis, Data Sharing in A Secure Collaboration Environment	Educational Program Development, Drug Design Programs in Disease Endemic Countries **Outcomes:**

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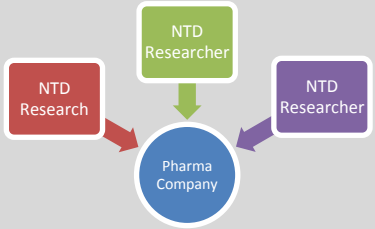
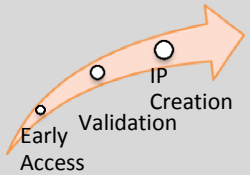
INTELLECTUAL PROPERTY	Biological/Chemical Targets, Materials, Models, Tools-Based Intellectual Property	Patent Pools E.g. POINT, WIPO Re: Search; Moving beyond technological access, pharmaceutical participants are seeking to directly engage NTD researchers. 	Royalty-free licensing for R&D and sale of products for least developed countries **Drivers:** 	Research Program Development, Licenses	NTD Researcher Hosting Programs, Technology Transfer	Co-Location of Research Programs in Disease Endemic Countries **Outcomes:**

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