

The Open Drug Discovery Teams (ODDT) Mobile App: A New Way of Sharing Tuberculosis Data Openly

Sean Ekins¹ and Alex M. Clark²

¹ Collaborations in Chemistry, 5616 Hilltop Needmore Road, Fuquay Varina, NC 27526, U.S.A., ² Molecular Materials Informatics, 1900 St. Jacques #302, Montreal, Quebec, Canada H3J 2S1.

What is Tuberculosis?

Mycobacterium tuberculosis (*Mtb*) is the causative agent of tuberculosis (TB), infecting approximately one-third of the world's population and resulting in 1.7-1.8 million deaths per year. While there are many approved drugs active against *Mtb* new ones are therefore urgently needed to combat this global epidemic that is heavily affected by factors such as resistance to the available regimen of drugs and co-infection with HIV. A novel TB-focused therapeutic has not been approved in over 40 years and there has been a dramatic increase in interest and funding in this disease over the last decade. We are involved in collaborative drug discovery efforts for TB and are evaluating technologies to enable this including ways to make the data more open and accessible.

The Open Drug Discovery Teams (ODDT) project uses a free mobile app as user entry point <http://tinyurl.com/6l9qy4f>. The app has a magazine-like interface, and server-side infrastructure for hosting chemistry-related data as well as value added services. The project is open to participation from anyone and provides the ability for users to make annotations and assertions, thereby contributing to the collective value of the data to the engaged community. The infrastructure for the app is currently based upon the Twitter API and uses Google Alerts RSS feeds as a useful proof of concept for a real time source of publicly generated content.

We now highlight how ODDT can be used as an electronic notebook to share new scientific data on Tuberculosis and engage this research community by following #tuberculosis using Twitter and Google Alerts. It is quite feasible that in future this disease could standalone as a separate app due to the amount of information created and data that could be shared openly or linked to.

