

O-10: BRINGING BACK NATURE TO DRUG DISCOVERY: NATURAL MOLECULES IN AN ANTIBACTERIAL PROGRAM

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It is a well-known fact that molecules from nature have provided a vast majority of antibacterial compounds. The total abandonment of natural products in drug discovery research, a platform that achieved so much success in the past, makes for a bleak future for totally new antibacterial agents coming on line. The path to discovery with the best prospects for success in an antibacterial program must integrate natural products in to the program. Sequoia Sciences was founded to deliver to the drug discovery process a structurally diverse library of natural products isolated from plants. The proprietary design of this library allows the screening of these compounds at optimal HTS concentrations without non-drug-like interferences. Sequoia has built an analytical process that can facilitate the rapid isolation and structure elucidation of active compounds. This talk will discuss a specific example of a set of compounds that were discovered from our natural product collection that exhibits remarkable activity against uropathogenic clinical strains of *E. coli*. Detailed will be the scientific strategy that Sequoia employs in order to rapidly uncover the chemical diversity in natural products. Expanding upon known advanced analytical technology and techniques, Sequoia accelerates the drug discovery process using a natural product source.