Marine Drugs and Natural Products

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Abstract

Marine natural products based drug discoveries Natural products and their derivatives account for about half of the New Chemical Entities (NCEs) for drug discovery to treat human diseases. For example, 78 of the 118 small-molecule NCEs identified for antibacterial agents were from either natural products or their derivatives during 30 years between 1981 and 2010. For anticancer drug discoveries, 85 of the 175 small molecules, for 70-year span from 1940 to 2010, were from natural products, their derivatives, metabolites and mimics. To date, natural products have provided the most successful supply of drug leads. Marine natural products have contributed to eight drugs or cosmeceuticals that were approved by the US Food and Drug Administration and European Medicines Agency. In this talk, drug discoveries based on marine natural products will be discussed.

Biography:

Rongshi Li is a Professor of Chemistry and Medicinal Chemistry in the Department of Pharmaceutical Sciences, College of Pharmacy and University of Nebraska Medical Center. He spent 14 years in industry advanced from Scientist to Senior Vice President after his Post-doctoral training at University of California, San Francisco. He began his academic career in 2008 at Moffitt Cancer Center, Tampa, Florida. In 2013, he was recruited to University of Nebraska Medical Center. Since 2008, he has published over 20 peer-reviewed articles, published and filed 31 US and PCT patents, edited two books and delivered over 40 invited talks.