



2018 Fall LIFE SCIENCES & IBB SEMINAR

Chemical Biology Approaches to Modulating Protein-Protein Interactions

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Most drugs on the market today target proteins with defined small-molecule binding sites, such as enzymes. However, many therapeutic target proteins do not possess these natural binding sites, such as those involved in protein-protein interactions (PPIs) associated with various diseases. Molecules capable of modulating these disease-related PPIs can be potential therapeutic candidates. However, it is a daunting task to discover such molecules largely due to the relatively large and flat protein interfaces involved in PPIs. Typical drug-like small molecules may not be suitable to effectively cover such large contact areas. Thus, there is an urgent need for the development of new chemical space to target protein interfaces. In addition, another challenge in identifying PPI modulators is the lack of convenient, generally applicable high-throughput screening (HTS) methods. Here I will present the development of novel peptidomimetics as an excellent source of PPI modulators and convenient affinity-based HTS methods that could facilitate the rapid identification of PPI modulators.

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- **Date: Sep 28 (Fri) 4:30PM**
 - **Place: Auditorium(1F), POSTECH Biotech Center**
 - **Inquiry: IBB Tel: 279-8284**