

S26-4 Medicinal Chemistry as an Interface between Organic Chemistry and Biology

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In a recent medicinal chemistry, we find profound progress in the screening methods for new bioactive molecules as candidates for drug development. Furthermore, there are tremendous developments in the studies on target biomolecules. The recent advanced technologies of analysis of complex structures of bioactive molecules and target proteins have been applied to the simulation of protein-ligand interactions. This implies that organic chemistry is growing up to the protein field. The reactions of the substrate with enzymes and interactions between ligands and receptors are now in the territory of organic chemistry and thus we can design bioactive molecules under the consideration of target protein structures and their functions. Under this circumstance, it will be discussed how medicinal chemists can understand proteins as organic compounds and can apply the understandings to developing new drug candidates.