

### Drug Design and Drug Discovery

Rafik Karaman

Department of Bioorganic Chemistry, Faculty of Pharmacy  
Al - Quds University, Jerusalem, Palestie, Italy

E- mail: [rafikK@gmail.com](mailto:rafikK@gmail.com).

### Introduction

The Journal, Drug Designing: Open Access publishes the highest quality scientific articles amalgamating broad range of fields including molecular modeling, clinical research and drug discovery and delivery. This scholarly publishing journal follows a rapid peer review process for each submission to attain better quality and high impact factor. This scientific journal includes a wide range of fields in its discipline to create a platform for the authors to make their contribution towards the journal and the editorial office at Longdom Publishing promises a peer review process for the submitted manuscripts to maintain the quality of free journals. The journal is among the best open access journals and aims to publish most complete and reliable source of information on the discoveries and current developments in the mode of original articles, review articles, case reports, short communications, etc. in all areas of the field.

### Drug Designing

Alternatively, transformation of proteins from primary sequence to three dimensional structures provides some insights to structural biologist. Conserved sequence of proteins may yield similar structure and deposition of protein structures to databases helps computer based structural determinations to build algorithms and to predict three dimensional structures from primary sequences. A drug is defined as a substance which is used in the cure, relief, diagnosis, treatment, or prevention of disease. The development of any potential drug commences with the study of the biochemistry and physiology behind a disease for which pharmaceutical intervention is feasible [1]. A drug

is defined as a substance which is used in the cure, relief, diagnosis, treatment, or prevention of disease. The development of any potential drug commences with the study of the biochemistry and physiology behind a disease for which pharmaceutical intervention is feasible Drug design, often referred to as rational drug design or simply rational design, is the inventive process of finding new medications based on the knowledge of a biological target.

Drug is a term that was first introduced by Albert to signify a pharmacologically inactive chemical moiety that can be used to temporarily alter the physicochemical properties of a drug to increase its usefulness and decrease its associated toxicity [2]. Drug design can be utilized in the following: (1) improving active drug solubility and consequently bioavailability; dissolution of the drug molecule from the dosage form may be a rate-limiting step to absorption, (2) increasing permeability and absorption.

### Drug Discovery

Drug discovery is a lengthy interdisciplinary endeavor. It is a consecutive process that commences with target and lead discovery, followed by lead optimization and pre-clinical in vitro and in vivo studies to evaluate if a compound satisfies a number of pre-set criteria to start clinical development [5,6]. Drug discovery has been revolutionized with the advent of genomics, proteomics, bioinformatics, and efficient technologies including combinatorial chemistry, High Throughput Screening (HTS), virtual screening, de novo design, in vitro, in silico ADME screening, and structure based drug design.

Reviewers can download manuscripts and submit their opinions to the editor. Editors can manage the whole submission/review/revise/publish process. Review and Editorial Tracking Systems for quality review process. Editorial tracking System is an online submission and

review system, where authors can submit manuscripts and track their progress. Reviewers can download manuscripts and submit their opinions. Editors can manage the whole submission/review/revise/publish process. Publishers can see what manuscripts are in the pipeline awaiting publication.

The role of social networking sites towards journal We are happy to announce that the journal also now uses social media like facebook, twitter, linkedin, blog posters, advertisements, special issue banners etc. All the articles published in our journal are posted in social media so that it may help readers and researchers globally. LinkedIn: It is a professional networking platform. You can use it share updates on your research or a paper in a specific group or publicly. Mendeley: This platform can help you grow your network by joining groups of your interest. ResearchGate: It is a social networking platform especially for scientists and researchers to share and interact on research topics. It can also be used effectively to collaborate with other researchers on a common interest area.

## Conclusion

In conclusion, I would like to thank all prominent members of our Editorial Council for joining us in this new fascinating and promising academic journal and also the reviewers for their constant support and dedication for expert review process. Drug design involves multi - step procedures to resolve obstacles stemming from pharmacodynamics and pharmacokinetics there characteristics, whereas drug design is limited to resolving only pharmacokinetic issues related to a drug candidate.

## References

1. "Drug." Dictionary.com Unabridged (v 1.1), Random House, Inc., via dictionary.com. Retrieved on 20 September 2007.
2. ALBERT A (1958) Chemical aspects of selective toxicity. *Nature* 182: 421-422.
3. Karaman R, Fattash B, Qtait A (2013) The future of prodrugs - design by quantum mechanics methods. *Expert Opin Drug Deliv* 10: 713-729.

4. Chan OH, Stewart BH (1996) Physicochemical and drug-delivery considerations for oral drug bioavailability. *Drug Discov Today* 1: 461- 473. 23.
5. DiMasi JA, Hansen RW, Grabowski HG (2003) The price of innovation: new estimates of drug development costs. *J Health Econ* 22: 151-185.
6. DiMasi JA (2002) The value of improving the productivity of the drug development process: faster times and better decisions. *Pharmacoeconomics* 20 Suppl 3: 1-10
7. Gatto JG (2008) The changing face of bioinformatics. *Drug discovery today* 8:375-376