The Remarkable Impacts of Gordon Life Science Institute

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ABSTRACT

In this review paper, the remarkable impacts of the first Internet Institute, the Gordon Life Science Institute, as well as its profound and far-reaching influence have been systematically and comprehensively presented.

1. INTRODUCTION

Founded by Professor Dr. Kuo-Chen Chou, the Gordon Life Science Institute is the first internet institute ever established in the world. It is instructive and intrigued to briefly recall a story.

Because the subtle relation with his own mother and Buddha, Mao Zedong, the dictator and head of Chinese Communist party, had completely closed China's door from 1949 to 1976, seriously hurting China's economy development. Fortunately, things were changed. After the "Cultural Revolution" developed by Mao Zedong had been smashed, China had was under the leadership of Deng Xiaoping, who had clearly pointed out, "open up its door" would be the key and foundation for China's economic development. Ever since then, China has been starting economically expanding, and has become the second richest country next to USA only.

2. GROWING-UP AND STRONGLY ESTABLISHED

As a consequence of the "door open" policy and practice, Prof. Dr. Chou was invited by Professor Sture Forsén, the then "Chairman of Nobel Prize Committee", to work in Chemical Center of Lund University as a Visiting Professor. It was very difficult for Swedish people to pronounce "Kuo-Chen Chou". In order for his Swedish colleagues and friends easier to call his name, Prof. Dr. Chou changed "Gordon" as his name in Sweden. In 2003, about 25 years later, the same name was used for the Institute, meaning that Deng Xiaoping's policy can stimulate a lot of great creativities, as indicated by the enormous achievements [1-520].

3. SOME FACTS AND THEIR IMPLICATIONS

The Institute has achieved many fruits in science. Listed below are just a few.
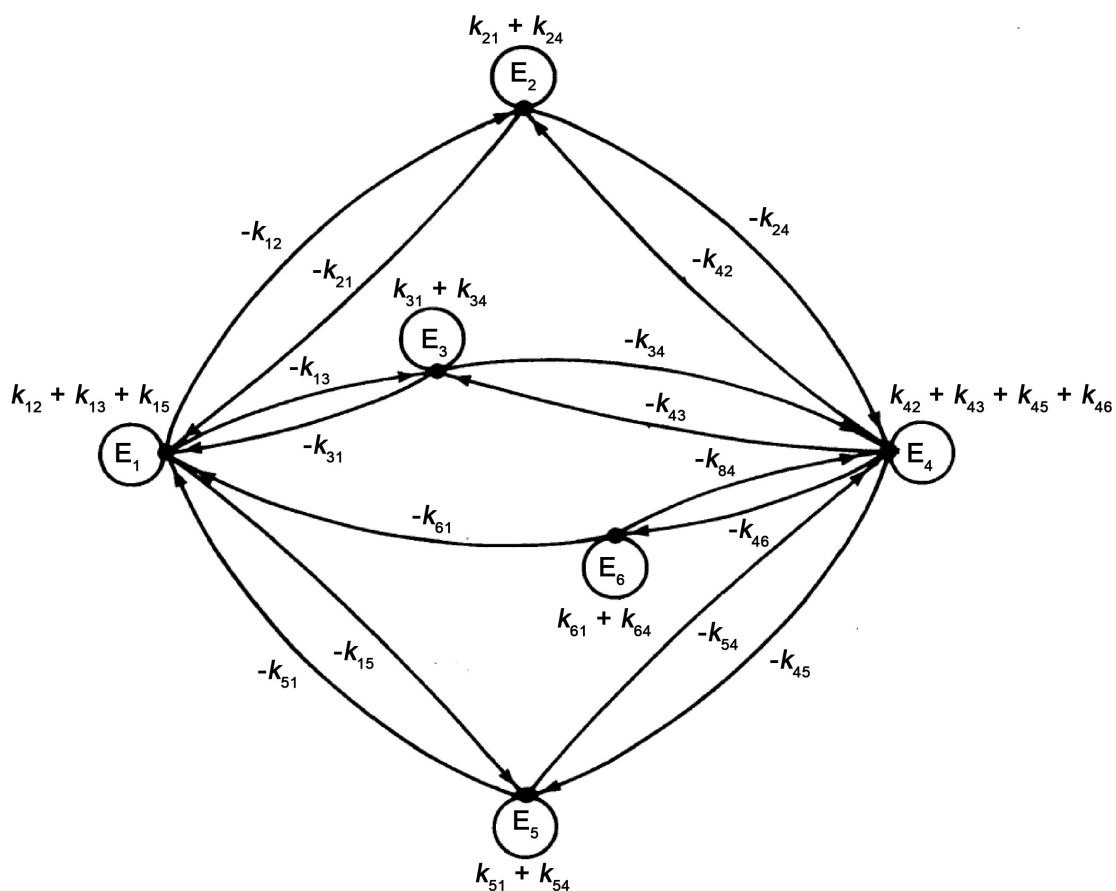
1) Graphical rules for enzyme-catalyzed rate laws.

Figure 1. Adapted from [521] with permission.

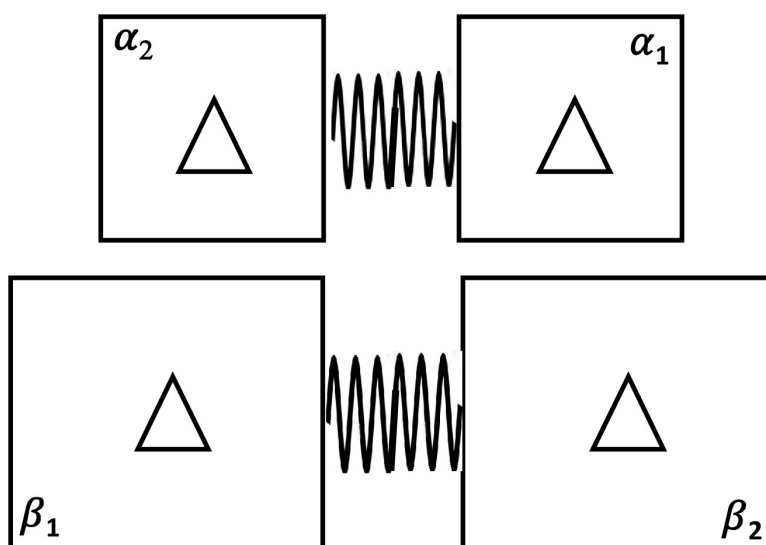2) The biological functions of low-frequency phonons.

Figure 2. Adapted from [4] with permission.

3) Diffusion-Controlled Reactions of Enzymes.
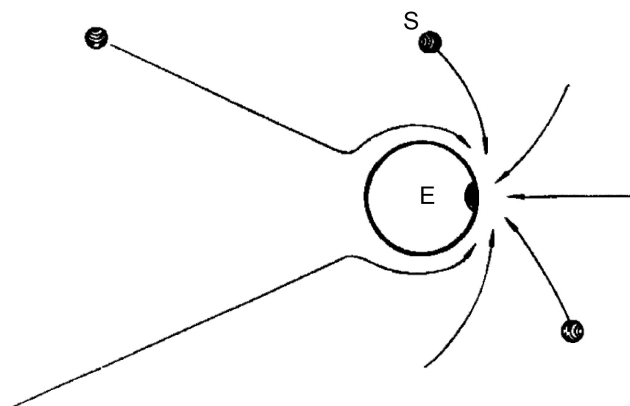
Figure 3. Adapted from [522] with permission.

4) The origin of the right-handed twist of beta-sheets.
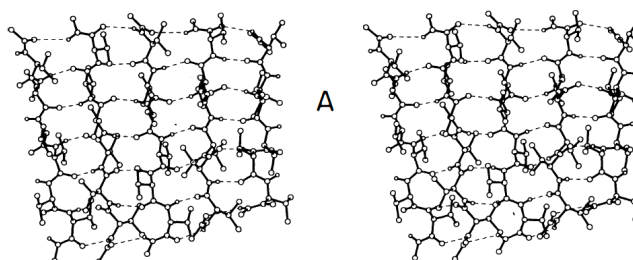
Figure 4. Adapted from [524] with permission.

5) Energetics of Multihelix Interactions in Protein

Figure 5. Adapted from [548] with permission.

6) Study of the Cavity-Active-Site of Enzymes.

Figure 6. Adapted from [74], with permission.

7) Prediction of membrane protein types and subcellular locations.

Figure 7. Adapted from [84] with permission.

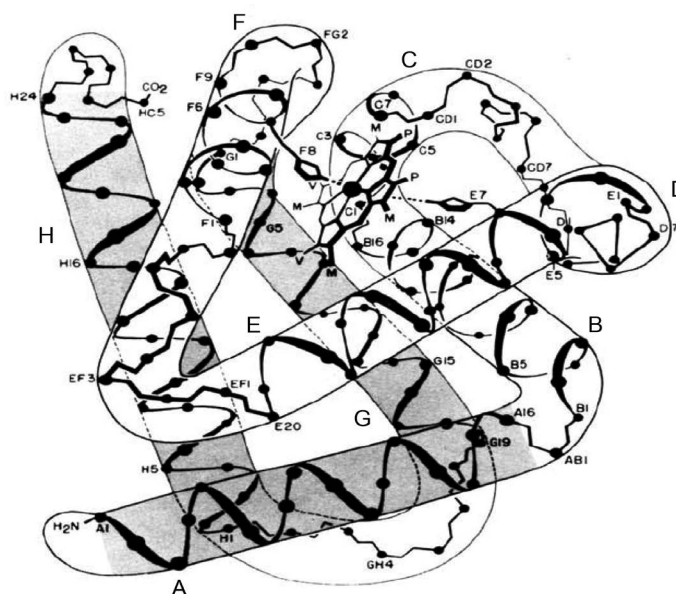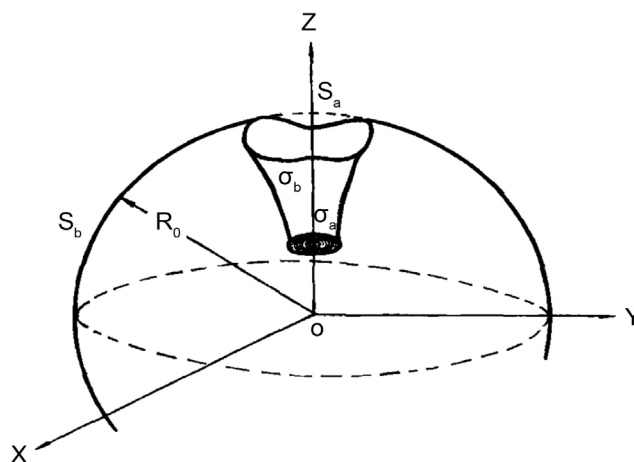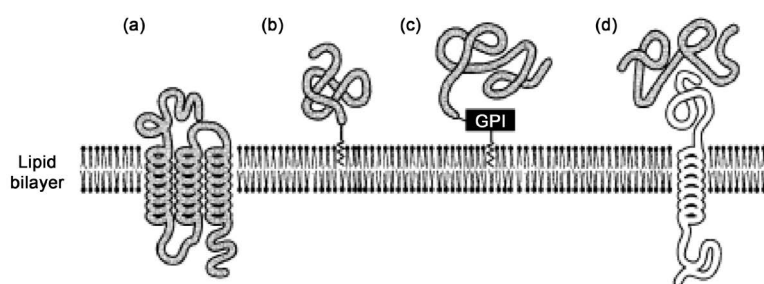8) Binding mechanism of coronavirus main proteinase with ligands and its implication to drug design against SARS.
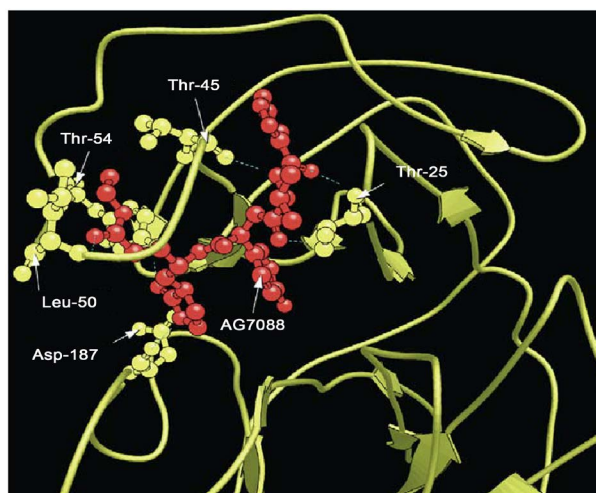
Figure 8. Adapted from [102] with permission.

9) Identify HIV protease cleavage site.
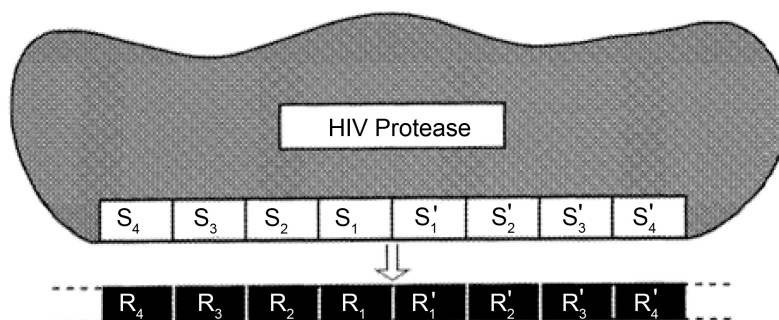
Figure 9. Adapted from [58] with permission.

10) Propose pseudo amino acid composition.
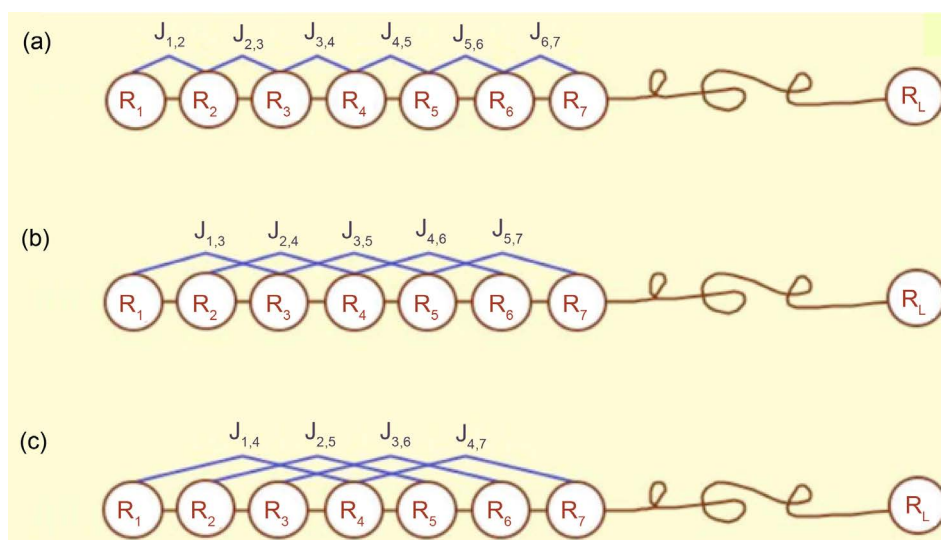
Figure 10. Adapted from [217] with permission.

Proposing the 5-steps rule [418, 419, 422, 502, 525-548].

4. CONCLUSIVE REMARKS

It is really awesome and amazing for the Internet Institute to achieve such great achievements during so short period of time, fully indicating "the community with a shared future for mankind" (*i.e.*, "人类命运共同体"), the philosophy of Xi Jinping is indeed very wise. Particularly, the internet institute is working in different countries or areas, and it is very useful to deal with epidemic (see, e.g., [513, 516, 520]). Up to March 2019, the Institute has 26 members. Among them, 5 have been selected by Thompson Reuter and Clarivate Analytics as the "Highly Cited Researcher". Accordingly, it would not be surprised to see that five members of Gordon Life Scientist have been selected by Clarivate Analytics as Highly Cited Researcher (HCR) (https://hcr.clarivate.com/resources/archived-lists/), indicating that, based on the ratio of HCR per member, the "Gordon Life Science Institute" is far beyond the reach of the "Broad Institute of Harvard and MIT", becoming the very top in the world.

It is anticipated that more remarkable and fantastic accomplishments will be achieved by the Gordon Life Science Institute for many years to come.

CONFLICTS OF INTEREST

The author declares no conflicts of interest regarding the publication of this paper.

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