Experiences on Molecular Biology of Tumor Viruses at Academia and Drug Discovery at Industry

Mitsuaki Yoshida (Sch. Frontier Science, Univ. Tokyo)

Life science today is drastically evolving in both basic and applied sciences according to elucidation of human genome and development of various genome technologies. On the other hand, the life science is highly expected to be promoted for social contribution. Improvement of the infrastructures and granting systems have been extensively discussed in Japan for further promotion of the life science and have already been challenged. In addition to these, individual identification of scientists is also critical and responsive for such radical changes. In this presentation, I like to discuss some comments on university research based on my own experiences.

I spent most of my scientific life at university focusing on molecular biology of cancer particularly on leukemia development by human retroviral (HTLV-1) infection. After learning molecular biology on new tumorigenic viruses in humans, I challenged to use these knowledge and technology for drug discovery at pharmaceutical industry. Research and development for the drug discovery were so different from what I expected and not just extension of the basic research at the university. Recent drastic evolution in life science has expanded the differences and would further expand in its scale. From these aspects, I will discuss our responsiveness in research proposing that basic research and technology should be more focused at University.