What is the raison d’être of researchers?

Anyone can improve, if he/she is sincere and focuses on his/her work. However, researchers aim for reform, or innovation, rather than just improving; they set innovation as their goal. Easier said than done, but everyone setting their sights higher will automatically improve. The number of researchers working in a company who confidently call themselves researchers determines the company’s competitiveness.

Difference between academic and corporate researchers

The difference between academic and corporate researchers lies in their roles and not in their quality. Academic researchers seek originality in their researches, while the latter group aims to create innovation, or more specifically, changing the world by making innovative applications of original inventions (whether these inventions are their own or the work of others’). Both researchers basically require the same two types of attributes: the first of these is emotion, which constitutes a basis for their sense of mission, passion, justice, ideals, and dreams. The second attributes is ability, namely, superiority in logical thinking, the acquisition of knowledge and memorization. These attributes can be significantly strengthened by education and training.

Three qualities every researcher should have (not only for researchers)

The first quality is scope of imagination, or we can call it the size of living space for one person. This space gradually becomes larger and larger as we grow from children into adults — from home to school, local community, company, nation, world, or even space. Of course, we all know that only astronauts can survive in space for a limited period, but we can all imagine how it would be. The extent to which we can imagine our living space will be decided by the extent to which we can use our knowledge. People often say that the one of the core strengths of Japanese people is teamwork, but some are concerned that this feature is limited within Japanese community. This quality is to think about the goal of our one-and-only life, which affects various areas such as our selection of research themes, creation of business models, and strategic approaches. People having a broad scope of imagination excel in expanding experiences by understanding the experiences of others as if they were their own.

The second quality is individual character. People are truly diverse, even though they are of the same type biologically. We have become the dominant species on Earth, thanks to our physical and mental diversity. In contrast to this, however, many Japanese people tend to lose their individual personality within large organizations, both in the private sector and in the academic world, which makes human resources stereotypical and defensive and lacking in diversity. While defensive responses come from their instincts, proactive actions are born from individual talents and character. People who decide and act quickly seem to have strong character and endless reserves of energy. It is interesting to notes that these qualities are often seen in geniuses.

The third quality is the ability. This includes the ability to think logically and scrupulously, to acquire and memorize vast amounts of knowledge. Honors students have such abilities. Meanwhile, such capabilities can be strengthened significantly through education. In today’s age of Artificial Intelligence and big data, in addition to drawing on our own vast knowledge, we can leverage a large amount of data that have not been effectively utilized by human beings. The democratization of knowledge has begun, meaning that anyone who desires it can obtain all the knowledge they want.
The order of these three qualities actually has a significant meaning: the first is for identifying one’s field or gaining and understanding of one’s world and one’s place in that world; the second is for identifying one’s field and planning one’s future course; and the third is identifying paths to success, or using the ability to think logically and scrupulously during the implementation stage to reduce risks and streamline processes.

When developing a new business or a long-term strategy, pay attention to avoid beginning your actions with the third quality. It will limit the scope of your thoughts because it is natural to turn timid when you think about something on a global scale: you try to act aggressively and are obliged to accept eccentric geniuses. If you first think along the first quality, you can imagine freely developing a brilliant idea, and then you move to the second, where you focus on and clarify what you really want to achieve. After these processes, you can think along the third quality, or use your knowledge, wherein you think logically and scrupulously, leveraging abundant knowledge, because you are truly serious about achieving your goal. This was the ultimate objective of your education.

Objectives of Fujifilm’s Research & Development

With “Value from Innovation” as our motto, we are pleased to issue this multifaceted technical publication this year. I am confident that the footprints of our corporate researchers along the three qualities I mentioned in the Foreword will be palpable. We issue this publication every year with the hope of using these rare and unique technologies to further contribute to the world, connecting these technologies to actual businesses, and earning sales and profits as a result of the values we offer. Besides providing these publications, we currently operate Open Innovation Hubs in Japan, Europe, and USA, where customers can have hands-on experiences with our technologies. I truly hope that these efforts lead to win-win relationships with our business partners.