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## View from the Top

### Koji Korekawa, President, NTT Life Science and Prime Research Institute for Medical RWD

#### ▼Overview

In Japan, the average life expectancy and healthy life expectancy differ by 9 to 12 years. Since this gap is not only a social issue but also affects individual well-being, it is necessary to raise awareness of public health and promote the prevention, early diagnosis, and treatment of diseases. To address these social issues through the use of health and medical big data, the NTT Group has launched two healthcare companies; NTT Life Science and Prime Research Institute for Medical RWD. We interviewed Koji Korekawa, president of both companies about the services provided by these companies and his mindset as a top executive.



## Front-line Researchers

### Shin'ya Nishida, Senior Distinguished Scientist, NTT Communication Science Laboratories

#### ▼Overview

Many mechanisms by which the human brain recognizes the various complex properties of objects in the real world remain unknown. Understanding these mechanisms is critical for scientific understanding of human-sensory-information processing and advancements in information-engineering technology. Researchers at NTT Communication Science Laboratories are leading research on the human perception of specific properties of objects called *Shitsukan* (Japanese word for the sense of quality) from interdisciplinary perspectives, such as information science, neuroscience, and psychophysics, in conjunction with researchers from inside and outside the laboratories. We asked Shin'ya Nishida, a senior distinguished scientist at NTT Communication Science Laboratories, about his pioneering research on *Shitsukan* and attitude as a researcher.



## Feature Articles

### Toward New-principle Computers

### Activities toward New-principle Computers

#### ▼Abstract

Non-von Neumann-type computers, such as quantum computers and Ising machines that operate on principles different from those of present-day computers, are attracting attention. They are particularly powerful when applied to specific types of problems such as combinatorial optimization problems, quantum chemical calculations, and prime factorization, and since solutions to problems such as these can have a significant impact on society, research of new-principle computers is moving forward at a vigorous pace. The following Feature Articles in this issue introduce theoretical and experimental activities regarding new-principle computers at NTT laboratories while describing recent advances in this field.

