Biography of Prof. Toshio ITO

This number of "Archivum Histologicum Japonicum," Volume 31 is dedicated to Prof. Toshio Ito upon his retirement in March, 1970. Dr. Ito, has played a leading role in the publication of this journal as one of the co-editors since its foundation.

Dr. Ito was born in 1904 to a doctor's family in a small village in Aichi Prefecture, which is situated along the coast of the Chita Peninsula. As his parents expected him to become a doctor, he studied medicine at Keio University in Tokyo after graduating from the First School of Aichi Prefecture in Nagoya. He graduated from the Keio University Medical School in 1930. As a student, he was taught by famous professors such as Dr. Kiyoshi Shiga who was the discoverer of the dysentery bacillus and Dr. Sahachiro Hata, famed as one of the founders of chemotherapy. They probably led him to interest in basic medical science research.

Dr. Ito entered the Department of Anatomy, Keio University Medical School, which was directed by Professor Keiji Okajima and began histological studies of the human cutaneous appendages. In 1932, he became an instructor and took the responsibility of education in osteology. He studied the oogenesis of the sea urchin with Dr. D. H. Tenner, Professor of Biology, Bryn Mere University, U. S. A., who had come to Keio University as an Exchange Professor of Rockefeller Foundation. This was the first step of Dr. Ito's research in the field of cytology.

He became an Assistant Professor in 1934, continuing his studies on fine structures of the cells and tissues of the human body as well as some lower animals. He clarified that the clear area at the juxtanuclear part of the plasma cell is nothing but the negative image of the Golgi apparatus.

In 1941 he moved to Tokyo Women's Medical College and became the Professor of Anatomy. He continued to teach at Keio University. During this year he was married. In his new position he concentrated on the study of the sweat glands and discovered two types of glandular cells in the human eccrine sweat gland. Day by day the circumstances in his laboratory became harder during World War II, and research was almost impossible under daily attacks by the Allied Air Force. This difficult situation continued for several years even after the peace was restored, due to the poverty of chemicals and instruments. There was no journal published in which he wanted to report the results of his work; this fact urged him to collaborate with the late Dr. Masaji Seki in originating this "Archivum."

Professor Ito moved, in 1948, to Maebashi Medical College which evolved into the present Gunma University School of Medicine, and became Professor and Chairman of the Department of Anatomy. For more than twenty years he has taught many students of the Medical School and the School of Nursing at Gunma University, and directed the research of the staff of the Anatomy Department. With many co-workers he devoted himself to the study of the liver, and found a new cell type that is situated in the wall of the sinusoid and always contains fat droplets. This cell was shown to differ from the Kupffer cell and was named the "fat-storing cell." Though he first found this cell in the human liver, he was able to demonstrate later the presence of this cell in the liver of all the species of vertebrate which could be examined.

Since 1960, he has studied the islets of Langerhans in the pancreas of various
vertebrates. He and his co-workers were the first who identified different islet cell types in lower vertebrates such as fish by modern staining and electron microscopical methods. He found that there are much more A cells in the islets of various lower vertebrates as well as in the whale, the body of which grows till the end of life, as compared with the islets in the human being and many other mammals.

Recently he has studied the fine structures of the respiratory organs, especially the pulmonary alveolar wall and the epithelia lining the trachea and bronchi, using both the light and electron microscopes.

During his professorship at Gunma University, he served as President of the Japanese Association of Anatomists, Director of the School of Nursing, Director of the University Library and Dean of the School of Medicine.

We hope that Dr. Ito will make further contributions to the advancement of histology and cytology.

February 2, 1970

Kazumasa Kurosumi (黒住一昌)
Professor of Gunma University
Institute of Endocrinology
Maebashi, Japan