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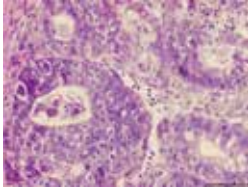
# 1. Study on host-pathogen relationship and pathophysiology in parasite infection

We are exposed to the infectious diseases. We need to develop a cheaper, effective, and safety ways to control the infectious diseases because these incur a heavy economic loss. One of the problems is that we have a little information to the infectious diseases. Hence, our mission is to understand the pathophysiological and immunological mechanisms of infectious diseases. In near future, we hope that the results of our research are applied to vaccine development and new strategies for disease control.

Our targets are parasites as follows:

**1. Avian coccidia:** Our research is to understand 1) the molecular mechanisms of parasite invasion, 2) the pathological mechanisms in the intestine, and 3) immunological mechanisms.

**2. Leishmaniasis:** We are studying to understand 1) the molecular mechanisms of disease development, 2) analysis of virulence factors of the parasites, and 3) the parasitic mechanism.



Eimeria tenella in Cecum

# 2. Food Science: physiological analysis of food ingredients

Food ingredients have important roles to our health. However, we have a little knowledge of them scientifically. Our mission in this research area is to understand the physiological effects of food ingredients, especially polyphenols and carotenoids, and to develop the innovative and useful way for human and animal health.

