## INFORMATION

Hokkaido University granted the degree of Doctor of Veterinary Medicine to the following researchers in March and June 1966 under a new regulation (1962) authorizing the granting of the Doctors degree to qualified researchers who are not graduates of the Post-Graduate School.

March 25—Mr. Tetsuro KATAOKA

June 30—Mr. Minoru SUZUKI

The authors' summaries of the theses are as follows:

## A NEW POTENCY TEST METHOD OF OLD TUBERCULIN

Tetsuro KATAOKA

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*National Institute of Health*
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This article appeared in "*Kekkaku*" (*Tuberculosis*), **40**, 12, 1965 (in Japanese with English summary).

## ELECTROPHYSIOLOGICAL STUDIES ON THE FUNCTION OF THE INFERIOR LARYNGEAL NERVE IN THE CAT AND RABBIT*1

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Discharge patterns of efferent impulses in the inferior laryngeal nerve were mainly investigated in association with the phase of respiration and the impulses.

In another series of experiments, mass reflex responses in the inferior laryngeal and phrenic nerves on single shock stimulations to the ipsilateral or contralateral superior laryngeal nerve were studied.

For these experiments, 107 adult cats and 12 rabbits were used.

1) It was found that most nerve fibers examined showed phasic discharges

*1 The original report of this work will appear in "Journal of the Physiological Society of Japan" in the near future.

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coincident with the inspiratory phase of respiration. However, a few nerve fibers discharged in the expiratory phase and some others showed tonic discharges.

2) Even after cessation of spontaneous respiration following succinylcholine administration, rhythmic bursts of discharges were still observed in the nerve fibers, showing some augmentation for a short period.

When artificial respiration was applied to these animals with arrested respiration, two types of grouping discharges were differentiated from the view point of their rhythmic discharges: one of them corresponded to the respiratory rhythm and the other did not.

3) Distinct mass reflex responses in the inferior laryngeal nerve with 6.0~12.0 msec latencies were recognized usually when single pulse stimulations were given to either the ipsilateral or contralateral superior laryngeal nerve, being accompanied by less distinct responses with long latencies of about 30~40 msec in some cases.

4) Mass reflex responses in the phrenic nerve with varied latencies ranging from about 16 to 70 msec were observed when single pulse stimulations were given to either the ipsilateral or contralateral superior laryngeal nerve, although these responses frequently could not be distinguished from random discharges in the nerve.

5) To summarized above noted results, it could be suggested that the efferent discharges in the inferior laryngeal nerve showed the activity of the respiratory center as a sensitive indicator.

Hokkaido University granted the degree of Master of Veterinary Medicine to the following 11 graduates of the Post-Graduate School on March 25, 1966. The authors' summaries of their theses are as follows:

## ENHANCEMENT OF PLASMIN ACTIVITY IN SWINE PLASMA BY THE ENDOTOXIN OF HEMOLYTIC *ESCHERICHIA COLI* (O139)

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(Summary of Masters thesis written under direction of Dr. T. HAGA)

Effects of the endotoxin extracted from hemolytic *Escherichia coli* (O139) on plasmin activity of swine plasma and its fractions were investigated. Results obtained are summarized as follows: