In a third paper, "Brain, Heart, Thyroid, Adrenals and Habitat" (*Growth,* **10**, 15–23 [1946]), the power equation was applied to adrenal-body weight relations of 310 animals including tropical and subarctic rodents, carnivores, ungulates; white whales and porpoise.

In a fourth paper, "Studies in the Comparative Anatomy of the Endocrine System," the following log-log graphs of adrenal-body weights were included: Figure 1, Adrenal and thyroid—body weight relations for 112 reptiles; Figure 2, Adrenal and thyroid—body weight relations for 2709 birds; Figure 3, Adrenal and thyroid—body weight relations for 256 rodents; Figure 4, Adrenal and thyroid—body weight relations for 158 primates.

In addition to the above, G. W. Crile and D. P. Quiring published in the *Ohio Journal of Science* (**40**, 219–259 [1940]), "A Record of the Body Weight and Certain Organ and Gland Weights of 3,690 Animals."

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Treatment of *Cryptococcus neoformans* in Mice with Stilbamidine[1]

The observation of Elson (*1*) that certain pathogenic fungi were inhibited by low concentrations of propamidine has centered interest in the treatment of fungus diseases with the diamidines. This interest has been kindled by the discovery of the efficacy of stilbamidine (4,4′-stilbenedicarboxyamidine) in the treatment of blastomycosis (*2, 3*) and actinomycosis (*4*) and of propamidine (*p,p′*-(trimethylenedioxy) dibenzamidine) as an adjunct to ethyl vanillate (ethyl 4-hydroxy 3-methoxy benzoate) in the treatment of histoplasmosis (*5*). Infections due to *Cryptococcus neoformans* have remained resistant to treatment. The favorable response obtained in the treatment of other fungus diseases prompted use of stilbamidine in experimentally induced infections with *Cryptococcus neoformans* of the central nervous system in mice.

Mice were infected with *Cryptococcus neoformans* according to the method of Smith, Mosberg, Maganieillo, and Alvarez de Choudens (*3*). A 48-hr broth culture of *Cryptococcus neoformans* was centrifuged and then resuspended in 1 cc of physiologic saline. After the mouse was anesthetized with ether and the head prepared sterilely, the midpoint of a line drawn between the eyes and the external auditory meatus was found. About 0.2 cm to 0.3 cm above this point a 28-gage needle about 0.5 cm in length was inserted in a rotating fashion to pierce the skull and enter the cerebral cortex. About 0.05–0.08 cc of the suspension of *Cryptococcus neoformans* was injected, the latter being the maximal possible amount.

[1] Reviewed in the Veterans Administration and published with the approval of the Chief Medical Director. The statements and conclusions published by the authors are the result of their own study and do not necessarily reflect the opinion or policy of the Veterans Administration.

Four mice so infected died between the 8th and the 15th day. Fourteen mice similarly infected were treated with 100 mg/kg stilbamidine diiesthionate[2] in 5% glucose in distilled water intraperitoneally. All the mice died between the 6th and 16th day after infection.

Stilbamidine, 50–100 mg/kg, administered intraperitoneally, has been reported as the maximum tolerated dose for mice and it is stated that ¼ to ½ of this dose repeated over several days is usually well tolerated (*6*). The mice in this experiment received 100 mg/kg up to a period of 12 days, before death from the infection. This large dosage did not affect the course of the disease.

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[2] The stilbamidine diiesthionate was supplied by Merck and Company, Incorporated.

A Combined Method for the Rapid Fixation and Adhesion of Ciliates and Flagellates

In the preparation of protozoan slides, difficulty is often encountered in affixing the animals to the slide without distortion. The method described below eliminates the need of egg albumin and also the drying process. The whole technique takes only 15 seconds, and the animals are simultaneously fixed and attached to the slide. The method makes use of the fact that dispersal currents cause protozoa to adhere to the surface of a glass slide. Among the reagents that produce this effect are: Formalin, ethylene glycol, acetone, ether, chloroform, and the lower alcohols (methyl, ethyl, propyl, butyl, amyl) and some of their isomers. Though all these compounds cause adhesion to the slide, tertiary butyl alcohol yields best results. Ethyl and methyl alcohols may be substituted for tertiary butyl alcohol, but they seem to cause more nuclear distortion.

A mixture of the reagents given below will affix almost all the animals in a droplet of culture. No cellular distortion occurs and cilia, cirri, cytoplasmic

granules, nuclei, and neuromotor apparatus are well preserved.

Fixative

10 vols. saturated solution of mercuric chloride
2 vols. glacial acetic acid
2 vols. commercial Formalin
5 vols. tertiary butyl alcohol C.P.

The above reagents are mixed just before using.

1. Place a large drop of culture on a slide (the droplet must be free of debris).
2. Pick up a pipet full of fixative and hold the tip about 2 cm above the slide.
3. Slowly drop the fixative directly onto the droplet of culture.
4. Once the currents have started, lower the tip of the pipet until it is in contact with the slide. Continue to expel the fixative slowly until the slide is flooded.
5. After 15 seconds drain the slide and place in 70% iodine alcohol (3–4 min).
6. Wash in 70% alcohol (3–5 min).

The slide may now be stained by any of the standard methods.

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"The Coryphaeus of Science"

THE following item is a translation of Lysenko's eulogy (*Pravda*, page 4, March 8, 1953) of the deceased Stalin which I believe will interest the readers of SCIENCE for a variety of reasons.

IVAN D. LONDON

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Hard, hard beyond words! He has departed from us—he who bestowed upon hundreds of millions of peoples a happy life—our leader, teacher, friend of the workers, great coryphaeus of native science: Iosif Vissarionovich Stalin.

All branches of the sciences—social and natural—drew inspiration and will continue to draw inspiration from the teachings, from the works of Comrade Stalin.

For the development of a materialist biology, for the development of Michurinist theory we are beholden to Iosif Vissarionovich Stalin not only as the greatest builder and director of a socialist government in which have been created as never before favorable conditions for the growth and development of all branches of knowledge, but also as the direct teacher who revealed to us the significance of the works of I. V. Michurin.

Comrade Stalin pointed out the paths for development of the theory of Michurinist materialist biology.

That Comrade Stalin found time even for detailed examination of the most important problems of biology is especially well known to me as a biologist. He directly edited the plan of my paper, "On the Situation in Biological Science"; in detail explained to me his corrections; provided me with directions as to how to write certain passages in the paper. Comrade Stalin paid close attention to the results of the work of the August [1948] session of the Lenin All-Union Academy of Agricultural Sciences [in which "progressive, materialist, Michurinist biology triumphed over reactionary Mendelism-Morganism"].

Lenin discovered Michurin; Stalin nurtured our cadres of Michurinites; Stalin disclosed a series of most important biological principles.

Kolkhozes and sovkhozes, the socialist rural economy, and Michurinist biology have developed and are continuing to develop in indissoluble unity. This the Lenin-Stalinist Party teaches us. This is the sole path for the development of a genuine science, capable of revealing the principles of development of animate nature. Immortal are the cause and works of Lenin and Stalin. They consecrated their whole lives to the people—the builders of communism.

Let us rally yet more closely around the Stalinist Central Committee of the Communist Party and the Soviet government. Let us devote all our strength and knowledge to the cause of Lenin-Stalin, to the cause of building up communism!

Academician T. Lysenko

Twenty-Fifth Anniversary of the Discovery of the Raman Effect

A MEETING of the members of the Indian Association for the Cultivation of Science was held on March 7, 1953, in the premises of the Association at Jadavpur to celebrate the 25th anniversary of the discovery of the Raman Effect. M. N. Saha, F.R.S., was in the chair. The sequence of events leading to the discovery of the Raman Effect on February 28, 1928, was first narrated briefly by S. C. Sirkar, with the help of slides and demonstrations. Prof. Saha then pointed out that the discovery was one of the most important discoveries in science of this century, and that not only the Association but also the whole country took pride in the fact that such a discovery was made in the laboratories of the Association. He also pointed out that it was only because the Association had been publishing regularly a journal of its own that the discovery could be announced to the scientific world very quickly, so that priority for the discovery could be claimed by Prof. Raman, although a similar phenomenon was observed in the case of quartz a few weeks later by the Russian physicists, Landsberg and Mandelstam. The following resolutions were then adopted unanimously:

"Resolved that the members and staff of the Association express their sincerest felicitations to Prof. C. V. Raman on the 25th anniversary of the discovery of Raman Effect.

"Resolved further that a copy of the resolution be sent to Prof. C. V. Raman."

S. N. SEN

Indian Association for the Cultivation of Science

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