

the Commission in 1948 at a time and place soon to be announced. However, it can be said at once that the Commission does not seek in any fashion to control cancer research anywhere. That would be unwarranted intrusion. Rather, I believe it to be the intention of the charter members of the Commission to give advice and some financial assistance when requested and to promote cooperation in cancer research between the nations that welcome it.

No nation, large or small, has a monopoly of wisdom. All can participate in the world problem of discovering more effective means to prevent, diagnose, and cure cancer. Progress in cancer research springs from quality, not quantity. The research front in cancer is so extensive that many small but promising research projects costing but little can be selected as well as large ones. Both are demanded and the sooner the better, for there is urgency. There is also something to be said in favor of holding the annual meetings of the International Cancer Research Commission not where there are comparatively large groups of active investigators but in other countries which thereby may be encouraged more vigorously to organize their resources against cancer. We have great expectations that national frontiers will give way in the pooling of such resources. The vision includes some neighboring countries, unable financially alone to establish and maintain the well-equipped cancer research

institutes required for certain lines of inquiry, joining forces for the common good.

Looking back to the feverishly active days of the Congress, it is clear that the *International Cancer Research Commission* developed smoothly because it was something everybody earnestly wanted and because the wisdom of the policy of decentralization, adopted at the very beginning, was self-evident. This policy found expression in equal representation by all nations, in the headquarters of the Commission being temporary and dependent upon the location of the chairman of the Executive Committee of the Commission, and in the decision never to hold annual meetings of the Commission consecutively in the same country. It is safe to say that the charter members of the Commission share with President Truman the hope that international cooperation thus made effective will spread to other problems of world concern.

The 139 representatives of 40 nations returning home from the Fourth International Cancer Research Congress are ambassadors of good will and of hope for all nations. They look forward with pleasure to the Fifth Cancer Congress. No decision was reached as to where this will be held; but, as a decentralization measure, it will certainly not be in the United States. Recommendations as to location will be made to the Union Internationale Contre le Cancer by the International Commission.

Obituary

S. F. Light

1886-1947

The tragic death by drowning of Prof. S. F. Light on June 21, 1947, represents a severe loss to biology. Prof. Light had for 22 years been a member of the Department of Zoology at the University of California, Berkeley.

S. F. Light was born into a Presbyterian minister's family in Elm Mills, Kansas. After graduation from Park College, Missouri, in 1908, he spent two years teaching in government schools in Japan, two in the Manila High School, Philippine Islands, and two as instructor in Zoology at the University of the Philippines, taking a Master's degree from that institution in 1913. Except for one year (1914-15) at Princeton University as Procter Fellow, his service at the University of the Philippines as assistant, associate, full professor, and department head was continuous until 1922. From 1922 through 1924 he served as professor and chairman of the Department of Zoology at the newly organized University of Amoy, China. Dur-

ing these years he published a series of careful systematic studies on Philippine coelenterates, especially alcyonarians and scyphozoans, and on oriental termites. Some of these grew out of expeditions of which one, to Puerto Galero, Mindoro, in 1912, is of special interest, because this site has since been chosen, largely by his students, for the marine station of the University of the Philippines. From Amoy, in addition to material for later termite studies, came accounts of the astonishing amphioxus fisheries of that region. A great body of less tangible results of his contact with tropical faunas enriched his teaching and thinking in later years.

In 1924 Light returned to the States, intending to work for the doctorate and return to the Orient. His work on termites attracted the attention of the late C. A. Kofoid, who persuaded him to remain at the University of California after taking the Ph.D. in 1926 on termite flagellates. At this time his interest in biological aspects as distinct from the purely taxonomic first made its appearance in published work. Besides describing several new

genera and species of mastigote protozoa, he actively investigated the specificity of the intestinal faunas of various termite species, both descriptively and experimentally, studying natural and experimental defaunation, refaunation, and transfaunation. He was able to explain the previously reported mitotic flares in the termite gut as normal refaunation after molting, not realizing how close he was to the amazing relations between host molt cycle and protozoan reproductive cycle, recently discovered by Cleveland in roaches.

Much needed systematic work on termites was resumed and protozoa abandoned, however, in 1928, partly due to the large share of responsibility he assumed for the extensive cooperative investigation into all aspects of pure and applied termite biology which culminated in the volume *Termiles and termite control* in 1934. During these years he became an international authority on the group, studying in particular the species of the western United States and Mexico, the South Pacific, and the Orient. This phase gave way about 1935 to the one which continued until his death—the analytical and experimental pursuit of problems of social physiology. During the course of a study involving staggering numbers of laboratory colonies of controlled composition, a large proportion of which remains to be published, the unimportance of genetic factors and the large role and much of the mechanism of caste determination by interaction in the social complex have been documented. The discovery of parthenogenesis in termites was one of several incidental results.

As an outgrowth of his teaching and special interest in the ecologic distribution of invertebrates, a program of analysis of the occurrence of species of the important fresh-water copepod genus *Diaptomus* was begun about 1934. First to be accomplished was a necessary systematic revision by which a large and cumbersome genus was satisfactorily divided into many subgenera, using new characters demanding high microscopic magnification. Toward an eventual attempt to explain the distribution, a large and carefully documented collection of western entomostracans was assembled during several years of

intensive field work. The great values of such a collection will doubtless be realized in the work of others to come.

Light exercised in his teaching a peculiarly pervasive and long-lasting influence on his students' points of view, interests, and habits of thought. An outstanding characteristic of the introductory course in zoology which he taught for many years was the painstaking guidance of teaching assistants in pedagogical technic and basic biological concepts. His advanced courses, undoubtedly unique in modern invertebrate zoology, were marked, respectively, by a critical, appreciative phylogenetic morphology and a critical natural history which insisted on a full realization of the values of sound systematics, keen field observation, and concrete, testable interpretation. The essence of the natural history course is to be found between the lines of its remarkable syllabus which combines a dynamic field approach to basic ecologic problems and practical aids to the mastery of a specific fauna. One of its peculiar values is the obvious flux or evolution, of which it represents but a stage. Its author always apologetically spoke of it as a highly tentative step toward a very important goal.

Prof. Light played his role in biology and academic life in personal contacts rather than in national or university organs. He profoundly affected the directions and attitudes of many graduate students and exerted a marked and constructive influence in departmental affairs. His intimates will remember the personal qualities of modesty—extending to a real underestimation of self and as real an appreciation of disciplines which he regarded as beyond his ken (*viz.*, optics, biochemistry), of exacting criticism in the use of words and ideas—driving him now to caution, now to very forward positions, of sincere interest in the human relations of all his assistants and students and of a highly developed aesthetic enjoyment of outdoor beauty. Many will feel that, although they never really knew the inner man, they learned vividly the goals and standards for which he lived.

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