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1998 ASHG AWARD FOR EXCELLENCE IN EDUCATION
Professor Ching Chun Li, Courageous Scholar and Educator

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It would be simplistic to honor Ching Chun Li, known to most as C.C., as only a creative scholar in human genetics and biostatistics, because, foremost, he is an outstanding educator in human genetics, a role for which he is being honored. C.C. first came to the notice of the international genetics community for his book, *An Introduction to Population Genetics* (1948), published in China. This book caught the attention of H. J. Muller who had it reviewed by Jim Crow in [*The American Journal of Human Genetics*]. To most geneticists, this was the first lucid exposition of the monumental works of Fisher, Haldane, and Wright, and these masters, in the words of Jim, "are in no small measure indebted to him [C.C.] for making their work much more accessible" (Crow 1984, p. 177).

C.C. was born in Tientsin, China, on October 27, 1912 (Spiess 1983). He graduated from a British missionary school and from 1932 to 1936 attended the University of Nanking to study agronomy; it is there that he came to love genetics. He pursued this [love] further by obtaining his Ph.D. in plant breeding and genetics from Cornell University in 1940, but he also trained in mathematics and statistics at the University of Chicago, Columbia University, and North Carolina State College. [He] then returned to China in 1942, with his new bride Clara Lem. Those were difficult days in China, but undeterred, C.C. mounted a vigorous genetics program, wrote *An Introduction to Population Genetics,* and by 1946, at the ripe old age of 34, was professor and chairman [of the Department of Agronomy] at the National Peking University.

And then the bottom fell out. [The year] 1949 saw the arrival of the Communist government in mainland China, and with it the wholesale adoption of Soviet thought. Suddenly, Chinese geneticists had to contend with the pseudo-scientific ramblings of Trofim Lysenko, and supporters of Mendel and Morgan became enemies of the state (Joravsky 1970). C.C. continued to teach, write, and defend genetics, despite immediate danger to him and his family. As geneticists, we [are] all indebted to him for these courageous acts. But even he could not stem the tide. C.C. was forced to resign, [at which time he and his family] began a long, difficult, and personally tragic escape across China. The Li [family] arrived in Hong Kong without any papers in March 1950, and C.C. wrote a poignant piece for the *Journal of Heredity,* titled "Genetics Dies in China" (Li 1950).

Once again, H. J. Muller came to his rescue. On his way back from India, Muller visited the Li [family] in Hong Kong and intervened to [secure] their entry into the United States. [They] arrived in the New World in May 1950, and C.C. soon obtained a position at the University of Pittsburgh, but only as a research associate.

Once in the United States, C.C. again prospered and flowered. He started a vigorous research program in genetics and biostatistics, published extensively, taught even more than that, rewrote his population genetics textbook, and wrote several new books. He soon became a professor and then chairman of the Department of Biostatistics [at the University of Pittsburgh]; now, 48 years later, he remains in Pittsburgh as an emeritus professor. In 1960, he was elected president of our society. This is also the time when he arrived at some landmark ideas. There were very many, but I believe his most important contribution was on the mathematics of identity by descent and state between any two relatives (Li and Sacks 1954). This [theory] is so widely used today and is so much a part of the obvious, we often fail to recognize its origins.

C.C.'s hallmarks are his keen intellect and teaching style. He has taught genetics and statistics to uncountably many, and the Pittsburgh students are incredibly lucky to have such a gifted and motivating teacher. Yes, he has had his share of graduate students, such as Cathy Falk and Ken Garver, but I would venture the guess that many, many more individuals, and not necessarily geneticists, have learned genetics and have been motivated by his books, without ever setting foot in his class. And why is this [the case]? Tony Murphy said it best: "We learn[ed] from you the cardinal importance of an un-

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cluttered perception of a fundamental idea. Mediocre minds can make simple ideas very complicated. It is only genius that can make a complicated idea both simple and illuminating."[1]

This teaching art is reflected in the 10 books that C.C. has authored and in his numerous articles and essays. Two articles of C.C.'s stand out: his 1960 American Society of Human Genetics presidential address, "The Diminishing Jaw of Civilized People" (Li 1961), a discussion of human germinal mutation rates and radioactive fallout, in which he championed scientific objectivity in genetics rather than political philosophy; and "A Tale of Two Thermos Bottles" (Li 1970), his response to the nature-nurture controversy arising from population differences in IQ scores. His brilliant explanation of multifactorial inheritance in [that article] is probably [even] more relevant today.

I am lucky to have been C.C.'s colleague for 13 years, and [I] am indebted to him for all that he taught me, including honesty and objectivity in science. But I came across C.C. Li much earlier, in Calcutta, India, on August 18, 1972—not in person, but [through] his book *Human Genetics: Principles and Methods* (Li 1961). Standing in the stacks of a dusty bookstore in Calcutta, I came upon this book by chance, stood and read it for hours, and discovered a new world of the quantitative consequences of Mendelian genetics.[2] This book, probably not widely read anymore in this molecular age, is still topical. It covers segregation analysis; linkage analysis, including sib-pair mapping; disease-marker association studies; and quantitative traits. The book was lucid and exciting. [Li] was my teacher across all those 8,000 miles.

Fellow members, let us honor this teacher, mentor, and friend for being a most deserving recipient of our society's 1998 Award for Excellence in Education.

[1.] From a letter dated September 14, 1982, from Edmond A. Murphy to C.C. Li, on the occasion of the latter's 70th birthday.

[2.] The actual story is somewhat different and is being included here on the insistence of the Lis. I went to the bookstore to purchase a book on theoretical physics, also by a Li. The physics text was incomprehensible to me. Next to it on the shelf was the C.C. Li book on human genetics.

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