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Jeffrey Friedman Awarded Shaw Prize



Image Title: Douglas Coleman (left) and Jeffrey Friedman pictured in 1995 at The Jackson Laboratory, Bar Harbor, Maine. - Courtesy of The Jackson Laboratory

The Shaw Prize Foundation in Hong Kong announced today that Jeffrey M. Friedman, a Howard Hughes Medical Institute investigator at The Rockefeller University, has been awarded the Shaw Prize in Life Science and Medicine.

Friedman shares the \$1 million award with Douglas L. Coleman, emeritus scientist at The Jackson Laboratory, for work leading to the discovery of leptin, a hormone that regulates food intake and body weight.

The Shaw Prize consists of three annual awards in astronomy, life science and medicine, and mathematical sciences. These international awards honor individuals who have achieved distinguished breakthroughs in academic and scientific research. The awards are dedicated to furthering societal progress, enhancing quality of life, and enriching humanity's spiritual civilization. The 2009 prizes will be presented to recipients in October at a ceremony in Hong

Kong.

The leptin story began in 1950, when researchers at The Jackson Laboratory in Bar Harbor, Maine, noticed that they had a strain of mice that were obese, lethargic, insulin-resistant and constantly hungry. This so-called *ob/ob* mouse, Friedman says, “lives in a state of perceived starvation, so ironically it becomes fat.”

In the 1970s, Douglas Coleman at The Jackson Laboratory conducted a series of experiments that led him to propose the existence of a "satiety factor" that would account for obesity and type 2 diabetes among certain mice.

The scientific description of Coleman’s satiety factor emerged in 1994, when Jeffrey Friedman and his colleagues at The Rockefeller University found the mutated *ob* gene responsible for obesity on the *ob/ob* mouse. The next year, Friedman’s group purified the normal *ob* gene’s product, a hormone they dubbed leptin for the Greek word *leptós*, which means "thin." When they gave the obese mice leptin supplements, the animals lost weight, became more active and began responding to insulin.

In 2006, the Shaw Prize in Life Science and Medicine was awarded to HHMI investigator Xiaodong Wang at the University of Texas Southwestern Medical Center at Dallas. HHMI investigator Robert J. Lefkowitz at Duke University Medical Center was awarded the Shaw Prize in Life Science and Medicine in 2007.

The Shaw Prizes were established under the auspices of Sir Run Run Shaw, a Hong Kong film producer and chairman of Television Broadcasts Limited (TVB), the largest Chinese program producer in the world. The Shaw Prize is accompanied by a medal displaying a portrait of Sir Run Run Shaw and the imprint of a Chinese phrase that translates as “Grasp the law of nature and make use of it.”