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Bay Area researchers part of team that wins economics prize

Chronicle Photo illustration; Akerlof photo by Kurt Rogers / The Chronicle, others by Reuters

Clockwise from top: George Akerlof, Michael Spence and Joseph Stiglitz.

Nobel achievement

By Sam Zuckerman and Victoria Colliver
CHRONICLE STAFF WRITERS

Two Bay Area academics won the Nobel prize in economics yesterday for pioneering work on how the unequal distribution of information distorts a wide array of markets – everything from used cars to insurance.

George Akerlof of the University of California at Berkeley and Michael Spence, former dean of Stanford University Graduate School of Business, will share the 2001 economics prize with Columbia University Professor Joseph Stiglitz. The three will split an award worth more than $900,000.

The applications of this theory "have been abundant, ranging from traditional agricultural markets to modern financial markets," said the Royal Swedish Academy of Sciences in a statement explaining the awards. "The laureates' contributions form the core of modern information economics."

Akerlof's prize represents the 18th time UC Berkeley faculty members have won the prestigious Nobel prize, including four in economics. Berkeley's Daniel McFadden won the economics Nobel last year for developing statistical methods for analyzing how individuals make decisions.

The award to Spence is the 22nd for a Stanford scholar, including seven in economics. Spence retired as dean of the university's business school in 1999.

Beginning in the 1970s, Akerlof, Spence and Stiglitz

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Information equals efficiency

By Sam Zuckerman
CHRONICLE ECONOMICS WRITER

You want to buy a used car, but you're afraid the seller will unload a junker on you. To protect yourself, you lowball your offer. The seller screams that he just put in a new transmission, curses you out, but reluctantly takes your money.

Such is the stuff Nobel prizes are made of.

The Royal Swedish Academy of Sciences yesterday awarded its 2001 prize in economics to three American scholars – University of California at Berkeley's George Akerlof; Michael Spence, formerly of Stanford University; and Columbia University's

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Economics prize awarded

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developed the field of information economics. The cornerstone of the discipline is the concept of "asymmetric information" — the idea that the different knowledge buyers and sellers have can keep markets from working efficiently.

The work of the three scholars challenged some of the basic tenets of traditional economic theory, which assumes that market participants have the information they need to make rational decisions.

"The main conclusion of their work is that markets can go wrong," said Harvard University economist Oliver Hart.

Research in the field supported the principle that government sometimes has to step in to fix market imperfections by, for example, subsidizing health insurance or enforcing consumer protection laws. "This explains Medicare," Akerlof said in an interview.

At a press briefing yesterday, Akerlof, 61, said he learned of his Nobel prize through the traditional predawn telephone call from Sweden.

"I didn't know if it was a joke or not," he said. "I don't quite believe it. It will take a few days."

A native of New Haven, Conn., Akerlof said he was influenced by stories of the Great Depression when he was growing up. "I've always been interested in why people are poor," he said.

Akerlof joined the Berkeley faculty as an assistant professor of economics shortly after earning a doctorate from the Massachusetts Institute of Technology in 1966. He quickly became known for using research from sociology, anthropology and psychology in the traditionally insular economics discipline.

His breakthrough work written in 1970, "The Market for Lemons," was described by the Swedish academy as "the single most important study in the literature on economics of information."

Akerlof's essay showed how a potential buyer's lack of knowledge about the condition of a used car could make him suspicious and willing to pay less, lowering the price for cars that might be in good shape as well. That would make the overall used-car market smaller and less efficient than it might be if buyers knew what they were getting.

Akerlof is married to Janet Yellen, an economist at Berkeley's Haas School of Business and a former Federal Reserve governor.

Spence, 58, was vacationing on Maui when his middle-of-the-night call came. "This is a great honor," he said. "It came right out of the blue."

His research focused on labor markets — specifically how such factors as a job applicant's educational credentials act as a "signal" to employers indicating how well an individual will perform on the job. That might mean, for example, that individuals might get degrees from prestigious universities not only to acquire skills, but also to send a message that they would be valuable employees.

"Employers don't know until well after you're employed the full range of your abilities," said Spence, a collegiate hockey player who received his doctorate in 1972 from Harvard.

Spence, the father of three children, ages 16 to 22, said he is considering looking at how the areas he researched have been affected by the development of the Internet as a medium for transmission of information. Spence stepped down as dean of Stanford's business school in 1999 to join Oak Hill Venture Partners, a Menlo Park venture capital firm, where he focuses on the area of information technology.

The Nobel Memorial Prize in Economic Science is not one of the original awards established by Swedish inventor Alfred Nobel at the beginning of the 20th century. It was added in 1968.

Chronicle staff writer Ray Delgado contributed to this story.

E-mail the writers at szuckerman@sfchronicle.com. *and* vcolliver@sfchronicle.com.

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Stanford economist wins Nobel prize

FROM WIRE REPORTS

STOCKHOLM, Sweden — Three Americans, including one from Stanford University, won the Nobel prize for economics today for research into how the control of information influences everything from used car sales to the recent boom and collapse in high-tech stocks.

A. Michael Spence, 58, of Stanford University; George A. Akerlof, 61, of the University of California at Berkeley; and Joseph E. Stiglitz, 58, of Columbia University will share the $943,000 award.

So far, eight Americans have won Nobel prizes this year, one more than last year.

The laureates laid the foundation in the 1970s for a general theory about how players with differing amounts of information affect a wide range of markets.

Research into "asymmetric information" gave economists a way to measure the risks, for example, faced by a lender who lacked information about a borrower's creditworthiness.

It also explored how people with inside knowledge of a high-technology company's financial prospects gain an edge over other investors, while people who don't fully understand a company's finances may invest unwisely.

The theory helps economists explain why the recent bubble in high-technology stocks burst.

The winners' contributions "form the core of modern information economics," the Royal Swedish Academy of Sciences said in a written announcement.

It cited a watershed 1970 paper by Akerlof called "The Market for Lemons," which used car sales as an example of how poorly informed buyers can end up with products that don't work well.

"When you buy a used car you're always careful because you're wondering why that person is selling the car. When you're selling, you're worried you're not going to get a good price," he said. "People are suspicious."

Spence, the former dean of Stanford's business school, was cited for coming up with ways to measure "signaling," when people and businesses go out of their way to boost their image.

For example, individuals earning a graduate degree get more than an education — they send a signal to prospective employers that they work hard. A company that pays dividends on its stocks sends a signal that it is doing well.

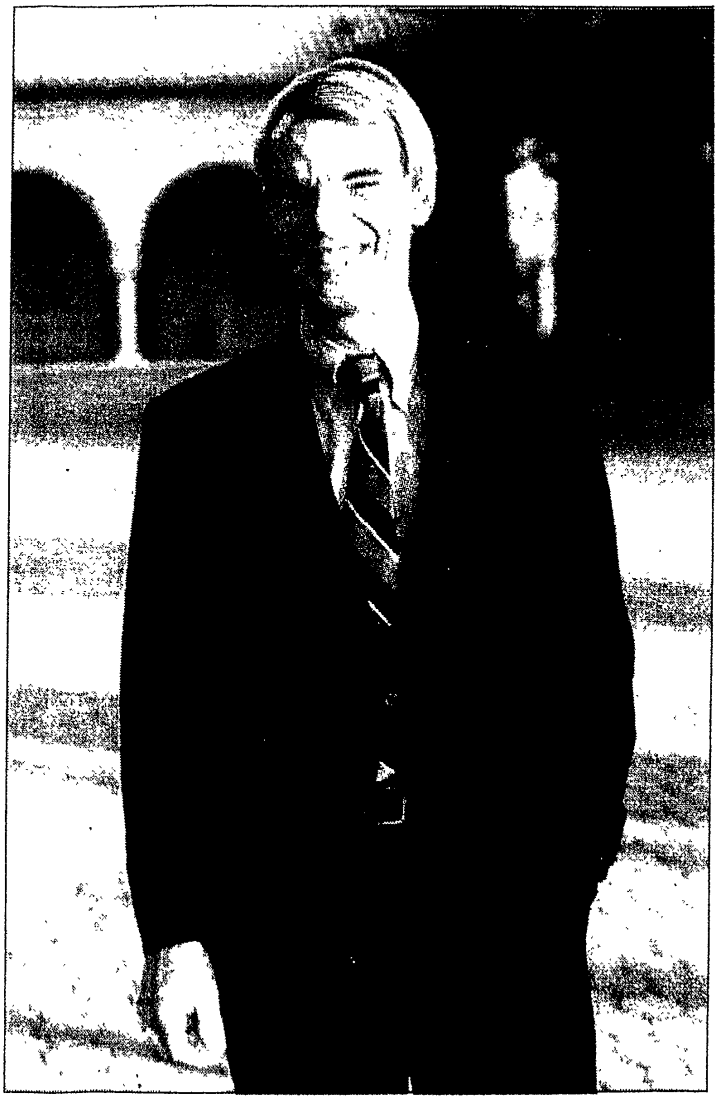
"All of us were given the award for trying to understand how markets perform when people have imperfect information," Spence told The Associated Press by telephone.

Stiglitz, for his part, measured how poorly informed parties can boost their business by extracting information from better informed ones.

A car insurance company, for instance, can glean information about whether customers are high-risk or low-risk by the size of deductibles and premiums they choose.

"The big question in economics is when do markets work and when do markets fail. These three economists moved that analysis into a new realm — where some people in markets know more than other people in markets," said Gregory Mankiw, an economics professor at Harvard University.

Also announced today was the chemistry prize awarded to two Americans — K. Barry Sharpless and William S. Knowles — and a Japanese scientist, Ryoji Noyori, for showing how to better control chemical reactions used in producing medicines.



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