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An occasional newsletter for the Emeritus Faculty Association

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Next Meeting:

Our next meeting will be on held Friday, November 3, 2017 at 11 am in the Chemistry Seminar Room 412. Our guest speaker will be Reuben Kline, Assistant Professor of Political Science. The title of the talk will be: High Risk and High Reward Decision Making for Climate Change Mitigation.

Brief synopsis: Preventing climate change requires technological investment. Some potential technologies (e.g., solar power) are low risk, but will only lead to incremental improvements. Other potential technologies (e.g., carbon sequestration) will have uncertain effects, but have the potential for large improvements. The Intergovernmental Panel on Climate Change 2014 report suggests that investments in these uncertain technologies will be necessary to meet realistic climate targets. But will people support these kinds of investments? We studied this using experimental economic games designed to simulate important aspects of technology investment for climate mitigation. We find that people are indeed willing to invest in risky technology, especially when such investments are critical to preventing climate change.

In Memoriam:

Robert de Zafra [NY Times article]

Robert L. de Zafra, a physicist who helped confirm that the chemicals in some aerosols and refrigerants were responsible for the expanding ozone hole over Antarctica, died on Oct. 10 in Stony Brook, N.Y. He was 85.

Dorothea de Zafra Atwell, a niece, said the cause was respiratory complications after surgery.

Dr. de Zafra, who taught at Stony Brook University for 38 years and lived in Setauket, on the North Shore of Long Island, contributed research at a crucial time in the growing understanding of ozone-layer depletion, traveling to Antarctica to take measurements with a spectrometer that he and his Stony Brook colleagues developed.

His initial research trip there was in 1986; in September 1987, convinced of a human cause of ozone-layer depletion, world leaders finalized the Montreal Protocol, a global agreement that set a timetable for elimination of the harmful chemicals.

In and around Setauket, however, Dr. de Zafra may have been better known for an entirely different role: his work to preserve his area's character and history. He was instrumental in rehabilitating historic buildings, sometimes buying them himself, and in establishing green spaces and fending off excessive development.

"This man was central to the destiny of our community for so many years," Steve Englebright, who represents the area in the New York State Assembly, said in a telephone interview. "He made some enormous contributions to our sense of place."

Robert Lee de Zafra was born on Feb. 15, 1932, in Scarsdale, N.Y., and grew up there and in New Milford, Conn. His father, Carlos, was an engineering professor at New York University, and his mother, Ellen Knox, was a seamstress in a design house.

Dr. de Zafra was a 1954 graduate of Princeton University and received his Ph.D. at the University of Maryland in 1958. He began teaching at Stony Brook in the early 1960s and in 1986 was part of the first National Ozone Expedition to McMurdo Station in Antarctica.

Scientists investigating ozone depletion measured solar radiation in Antarctica in 2015. Credit Felipe Trueba/European Pressphoto Agency

The ozone hole, a seasonal thinning of the ozone layer in the atmosphere over Antarctica that allows harmful ultraviolet rays to reach the Earth's surface, had recently been detected, but whether it was a natural phenomenon or caused by human activity remained under debate.

Dr. de Zafra and other researchers, led by Susan Solomon of the National Oceanic and Atmospheric Administration, were able to confirm that chlorofluorocarbons, used in refrigerants and as propellants in aerosol cans, were causing chemical reactions in the atmosphere that depleted ozone.

“Bob and his colleagues were the first to measure chlorine monoxide in the region of the ozone hole over Antarctica in 1986,” Dr. Solomon, now at the Massachusetts Institute of Technology, said in an email. “They showed that this chemical was present in much larger amounts than at other latitudes, and this and subsequent work firmly established that the ozone hole is due to human production of chlorofluorocarbon chemicals.

“These chemicals are now no longer produced anywhere in the world,” she added, “and the Antarctic ozone hole is expected to heal slowly over the next 50 years or so. Bob’s work was key in helping save the planet’s ozone layer.”

Louisa Emmons, now a senior scientist at the National Center for Atmospheric Research, was one of Dr. de Zafra’s graduate students then and made three trips to McMurdo with him, as well as joining him for field work in Hawaii and Greenland.

“Bob always loved those expeditions as an opportunity to focus on making measurements and figuring out what those observations told us about how the atmosphere worked,” Dr. Emmons said by email. He put in long hours, she said, but also liked to explore the exotic locales with students and other colleagues, hiking up the steep Observation Hill next to the McMurdo Station or cross-country skiing out on the ice shelf.

Among the honors and accolades accumulated by Dr. de Zafra over the years was an unusual one: In 1999 — Ms. Atwell thought it might have been a sort of retirement present — a ridge in the Cook Mountains of Antarctica was named after him by the United States Board of Geographic Names.

Dr. de Zafra’s first marriage ended in divorce. He is survived by his wife, Julia M. Phillips-Quagliata, whom he married in 1981.

Dr. de Zafra had bought and renovated two historic buildings in Setauket — one was his home — and in recent years had purchased a third, which he was still rehabilitating at his death. He served on various civic boards and was a leader in preserving the history of the Setauket area. The area’s claims to fame include being the center of the Culper spy ring, which George Washington deployed against the British and which was the subject of the recently concluded AMC series “Turn.”

Mr. Englebright said that just as Dr. de Zafra had helped sound the alarm on ozone depletion, he had also alerted him and many others to preservation issues.

“He was my sentinel on so many community projects,” Mr. Englebright said.

Participate in the Faculty Emeritus Documentation Project

The 2017-2018 academic year is a milestone in Stony Brook University history, as it marks the 60th anniversary of the institution. In an effort to document and preserve the unique and varied experiences of the university’s emeritus faculty, a questionnaire has been designed to elicit the personal reflections of faculty members’:

- impetuses for accepting academic positions at Stony Brook University.
- early experiences on the campus.
- views on the evolution and growth of the institution.
- contributions to departments and to the university.
- interactions with academic and administrative leadership.
- views on the institution’s role in the community (local and wider).
- assessments of the university’s mission and successes as a research university.

Your participation is vital to documenting Stony Brook University history.

Access information about the project and the questionnaire at:

<http://www.library.stonybrook.edu/special-collections-university-archives/university-archives/>

If you would like receive your copy of the newsletter via email instead of snail mail please send your name, address, and current email address to **Alison Gibbons** at: alison.gibbons@stonybrook.edu

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It always contains the latest emeritus news (click on "Next Meeting"), a list of members' email addresses, a list of officers, newsletter archives and many other useful links.

