

A member of the National Academy of Sciences and the American Academy of Arts and Sciences, Mr. French also participated in numerous scientific and professional organizations. He was active in the Committee for Green Foothills and the Friends of Hidden Villa (local environmental organizations which he loved dearly). He was also a longtime member of the American Alpine Club, the Appalachian Mountain Club, the Explorer's Club and the Sierra Club. He was married to Margaret Wendell Coolidge of Cambridge, Massachusetts for 54 years and is survived by two children, Helena Stacy French of Arlington, Massachusetts and Charles Ephraim French of Santa Barbara, California.

CHARLES EPHRAIM FRENCH

NELLO PACE

1917-1995

Nello Pace, one of our most versatile members, who joined the AAC in 1955, died June 17, 1995 of prostate cancer at the age of 78. Nello specialized in environmental physiology, which he once defined as the "study of all the discomforts known to man." To do this, he endured many of the discomforts himself, climbing Himalayan peaks to study the effects of low oxygen levels on humans, traveling to Antarctica to record the effects of sub-freezing temperatures, and even serving at a front-line unit during the Korean war to study combat fatigue. He also pioneered the study of weightlessness and its effects on the body. One of few experts in the field of gravitational physiology in the 1960s, he served as a consultant to NASA and conducted some of the first studies of weightlessness on orbiting monkeys.

Pace's most enduring interest was high altitude physiology, and to study it he spearheaded an effort to build a high-altitude laboratory on White Mountain in California. He directed the White Mountain Research Station, the highest permanent year-round research laboratory in North America, for 27 years. From labs at 4,000 feet in Bishop, California, and at the 11,000-foot level, the 12,500-foot level and the 14,246-foot summit of White Mountain he conducted numerous studies of the effects of low oxygen, and encouraged experiments in fields such as biology, physics, astronomy, botany and zoology. There he and colleague F. Duane Blume developed a respirator that was used by climbers in a 1971 ascent of Mount Everest. In 1983 the research station laboratory at 12,500 feet on Mount Bancroft was named the Nello Pace Laboratory in his honor.

Pace was born in Richmond, California, June 20, 1916, and grew up in the San Francisco Mission District. Upon graduation from Mission High

School in 1932, he entered the University of California at Berkeley, where he obtained a B.S. in Chemistry (1936) and a Ph.D. in Physiology (1940).

After a brief stint at the Medical College of Virginia, he joined the Navy at the outbreak of World War II. During four years of duty, he helped set up the U.S. Naval Medical Research Institute in Bethesda, Maryland, and headed its physiology facility. During this time he studied diving and aviation medicine, as well as the effects of heat, survival after shipwreck, and carbon monoxide poisoning.

Pace returned to UC Berkeley in 1946 to work on medical physics at the Donner Laboratory, and joined the physiology department faculty in 1948, ultimately becoming the chair before he retired in 1977. Recalled to active duty during the Korean War in 1952, he studied combat stress among frontline troops.

In 1954, he served as chief scientist on an ascent of Makalu to determine the effects of hypoxia or low oxygen levels on human performance, and led an International Physiological Expedition to Antarctica in 1957-58 as part of Operation Deepfreeze III to study how the body adapts to extreme cold. In the 1960s he was founding member of the International Society for Gravitational Physiology. He was one of the principal scientists collecting data on a pigtail macaque sent into satellite orbit in 1969 for 30 days on a "Primate Mission" called Biosatellite 3. His primary interest during the flight was the impact of weightlessness on the distribution of fluids in the body as well as mineral loss in the urine and changes in muscle mass. He continued his studies of weightlessness as an experimenter with the joint USA/USSR Cosmos 1129 biological Satellite Mission in 1979-80.

In his retirement, Pace founded the Galileo Foundation in El Cerrito, California, to support annual meetings of the International Union of Physiological Sciences Commission on Gravitational Physiology. From 1987 until his death, he served as president and director of the foundation.

As an indication of his broad interests, he once compiled an English-Sherpa-Tibetan vocabulary (published in 1960) that for many years was the only Sherpa dictionary in existence.

Pace served on numerous panels and committees of the National Academy of Sciences, NASA and the U.S. Public Health Service, and chaired the panel on gravitational biology of the Committee on Space Research (COSPAR) for many years. His honors include the Yuri Gagarin medal of the USSR Federation of Cosmonautics (1990), a Docteur Honoris Causa from the University of Bordeaux in France (1993), the Cavaliere Officiale (Order of Merit) from the Republic of Italy (1976), and a Founder's Award from the American Society for Gravitational and Space Biology (1990). He was an honorary fellow of the California Academy of Sciences and a member of organizations ranging from the AAC to the Undersea and

Hyperbaric Medical Society.

Pace is survived by his wife, Mary Jo de Rouhac Pace of Berkeley, daughters Susan Rossi of Oakland and Cynthia Barber of Union City, and grandchildren Carla and Dino Rossi and Robert Barber.

THOMAS JUKES

ROBERT LYON SPURR

1937 - 1995

My father, Robert Lyon Spurr, Alaskan mountaineer and mountain runner, was killed on North Maroon Peak outside Aspen, Colorado, on August 11. He apparently lost his footing shortly after beginning his descent and fell 250 to 500 feet.

It would be an understatement to say that Bob Spurr loved the mountains. The mountains of Alaska, where he lived, and Colorado, where he vacationed, were his playgrounds. He would get excited about every detail of each outing: the route he took, the animals he spotted, the altitude gained, the invigorating way it made him feel. He was always planning the next journey even while eagerly recounting the one just completed.

My dad was a "climber's climber," a purist, an enthusiast. He knew the mountains of Alaska better than his own backyard.

"It's a different world up there," he would say to my mom. "I wish you could see it."

He would talk to anyone about a climb or hike, always with particular interest in the route they had taken. To him, the quality of the route taken was more important than reaching the summit. Just a few days before his death, following the climb of Maroon Peak, he expressed disappointment in the guidebook's suggested route. He wrote in his log, "Too many traverses! Need to repeat climb — do ridge more directly." I dare say he did not even feel he had climbed the mountain. Sure, he had reached the summit, but climb the mountain? Not yet.

My dad began hiking and climbing as a boy, primarily in New England (Mount Washington, Mount Katahdin, Mount Chocurua), but also in Seattle (Rainier National Park) and Anchorage (Chugach Mountains) where his family lived for brief periods of time. His first and second "first recorded ascents" took place in the Chugach on Mount Gordon Lyon and P 3,990' (nicknamed "Mount Robert") in 1953, when he was just 16 years old. Shortly after, he returned to New England to finish his secondary education at Phillips Academy in Andover. Although he attended college (Drew University, 1959) and graduate school (Northeastern University, 1963) in the