Who was Caroline tum Suden, Ph.D.
Caroline tum Suden was born in San Francisco, California in 1900. She attended Berkley, and then obtained her M.A. at Columbia (1927), and a Ph.D. in Physiology from Boston University in 1933. Dr. tum Suden continued her work at the Physiological Laboratory of the Boston University School of Medicine and the Evans Memorial Hospital for twenty years (1927-1947) under her thesis advisor, Leland C. Hyman. Her research focused on the function of the adrenal gland, including the regulation of temperature, blood volume, and blood sugar, and vasomotor responses in totally and partially adrenalectomized rats. In 1947, Dr. tum Suden joined the faculty at Mt. Holyoke (a prestigious women’s only college) as an instructor, then Assistant Professor. In 1950 Dr. tum Suden was invited to join the staff of the Neurology Branch at the US Army Chemical Center at Edgewood Arsenal, Maryland where she primarily focused on neurobiology research, including investigations on the responses of voluntary muscle to electrical stimulation and acetylcholine injection.

Dr. tum Suden became a member of the American Physiological Society in 1936 and was a strong advocate for women in science. Following her death in 1976, the Women’s Caucus and Council of the APS established the Caroline tum Suden awards (1982), with the first awardees in 1983. The Caroline tum Suden Professional Opportunity Awards are a legacy to Dr. tum Suden’s commitment to physiological research and the advancement of women in science.

Who was Frances A. Hellebrandt, M.D.?
Frances Anna Hellebrandt was born in Chicago, Illinois in 1901 to immigrants from Czechoslovakia. She earned her B.S. in Physical Education from the University of Wisconsin-Madison in 1928, and continued as an assistant in the anatomy department from 1924-1927. There, she developed an interest in physical exercise with a particular interest in the effect of exercise in women. She questioned the traditional roles and attitudes of women present at the time, and challenged the gender-based exercise practices of that period. She continued her studies in Madison, completing her medical degree in 1929, followed with postgraduate education and training in Physical Medicine and Rehabilitation (PM&R). Following her residency, Dr. Hellebrandt was offered an Assistant Professor position and head of the Laboratory in Exercise Physiology at the University of Wisconsin-Madison, filling the shoes of her previous mentor, Dr. Percy Lawson.

Dr. Hellebrandt faced significant negative attitudes from male peers, yet continued to provide a training ground for all students at one of the few exercise physiology research laboratories in the country. Following a sabbatical in Prague, Czechoslovakia in 1935, she received a research award from the American Academy of Physical Education for “researches in the physiology of exercise especially in the dynamics and physiology of posture” in 1940. In 1944, Dr. Hellebrandt left UW-M as an Associate Professor, and accepted a position of Professor of Physical Medicine at Medical College of Virginia (MCV), and Director of the Baruch Center of PM&R, a newly developed initiative to aid in the treatment and rehabilitation of WW II veterans. In 1946, Dr. Hellebrandt also oversaw development of one of only two PM&R residency programs in the south. Dr. Hellebrandt was instrumental in developing and implementing a philosophy of comprehensive rehabilitation (physical, mental and vocational) of war veterans to return them to an active and productive life following injury.

In 1951, Dr. Hellebrandt moved to the University of Illinois as Professor and Head of the Physical Medicine Department, and Chief of Physical Medicine and Rehabilitation in the Research and Educational Hospitals of Chicago, Illinois. She returned UW-M in 1957 where she established the Motor Learning Research Laboratory. Dr. Hellebrandt published over 150 articles in 35 journals, and was best known for her work in muscle overload and pacing before her passing in 1992 at age 90. Dr. Hellebrandt was a pioneer not only in the field of PM&R research, but as a role model for women in science and medicine. The tum Suden/Hellebrandt Professional Opportunity Awards are a tribute to the role Dr. Hellebrandt played in advancing the status of women in physiology.