



Paul Thornell Baker
(1927-2007)

IN MEMORIAM

Paul Thornell Baker

Paul Thornell Baker, Evan Pugh Professor Emeritus of Anthropology at the Pennsylvania State University died on Thursday, November 29, 2007, at the age of 80 after a long illness. He is survived by his wife of fifty-eight years, Thelma Shoher Baker of Chapel Hill, North Carolina; his son, Joshua Baker of Hillsborough, NC; his daughters, Deborah Baker of San Francisco, CA; Amy Carter of Minneapolis, MN; Felicia LeClere of Granger, IN; as well as nine grandchildren.

Professor Baker was born in Burlington, Iowa on February 28, 1927 and received his undergraduate training at the University of New Mexico and the University of Miami. He attended Harvard University as a graduate student studying under E. A. Hooton and W. W. Howells and received his Ph.D. in Anthropology in 1956. As a young scientist he joined the U.S. Army Quartermaster Research and Development Center in Natick, Massachusetts, initiating studies on the physiological effects of a desert environment on human populations under R. W. Newman. In 1957 he joined the Department of Anthropology at Penn State, serving twice as department head. In 1962 he launched a major research program to understand how hypoxic stress, cold, and other environmental factors affect the biology of Native Peruvian Quechua living at high altitude in the Andes. A second decade-long research program in Polynesia explored the effects of migration and modernization on the human health and well-being of Samoans.

Professor Baker was a pioneer in the fields of human adaptability and human population biology and ecology. As a field scientist, modeler, and specialist in experimental research design, he viewed much of the diversity in human form and function to be a product of adaptive responses to major environmental stressors such as heat, cold, altitude, humidity and disease. Professor Baker was also an international science advocate with major professional contributions to the U.S. International Biological Program, UNESCO Man and the Biosphere Program, International Association of Human Biologists, International Union of Anthropological and Ethnological Sciences and the International Council of Scientific Unions. In addition to his distinguished scientific career, one of his greatest achievements was the training of several

generations of graduate students; a cadre of more than two dozen of today's distinguished scholars in the field.

Professor Baker's distinguished career was recognized by numerous honors and awards including the Franz Boas Distinguished Achievement Award from the Human Biology Association, the Charles R. Darwin Lifetime Achievement Award from the American Association of Physical Anthropologists, the Huxley Memorial Medal from the Royal Anthropological Institute of Great Britain and Ireland, Yugoslavian Order of the Golden Star with Necklace, Gorjanovic-Krambergeri Medal in Anthropology from the Anthropological Society of Yugoslavia, Mahatma Ghandi Freedom Award from the College of William & Mary, and as a NATO Senior Science Fellow and U.S. Fulbright Research Scholar (Peru) and Lecturer (Brazil). Professor Baker was also an elected member of the U.S. National Academy of Sciences, an Honorary Member of the Croatian Academy of Medicine, and a Past-President of the Human Biology Association, the American Association of Physical Anthropologists and the International Association of Human Biologists. He also served as Senior Vice-President of the International Union of Anthropological and Ethnological Sciences.

As a brilliant multidisciplinary, Professor Baker published in extensive depth and breadth in a field he helped to create. His enthusiasm for scientific research and training of graduate students was unmatched. Below is a selected list of some of his more than 200 scholarly contributions to Science, many of them with his former students.

Selected Publications of Professor Paul T. Baker from More than 200 Publications

Authored and Edited Books

Baker, P. T. and J. S. Weiner, eds. 1966. *The Biology of Human Adaptability*. 1st ed., New York, NY: Clarendon Press (2nd ed. 1967).

Baker, P. T. and M. A. Little, eds. 1976. *Man in the Andes: A Multidisciplinary Study of High Altitude Quechua*. Stroudsburg, PA: Dowden, Hutchinson and Ross, Inc.

Baker, P. T., ed. 1978. *The Biology of High Altitude Peoples*. Cambridge, England: Cambridge University Press.

Baker, P. T., J. M. Hanna and T. S. Baker, eds. 1986. *The Changing Samoans: Behavior and Health in Transition*. New York, New York: Oxford University Press.

Harrison, G. A., J. M. Tanner, D. Pilbeam, and P. T. Baker. 1988. *Human Biology: An Introduction to Human Evolution, Variation, Growth, and Ecology*. Third Edition. Oxford, England: Oxford University Press, 568 pp.

Articles and Book Chapters

Skerlj, S., J. Brozek, E. E. Hunt, Jr., K. Chen, W. Carlson, F. Bronczyk and P. T. Baker. 1953. Subcutaneous fat and age changes in body build and body form in women. *American Journal of Physical Anthropology* 11: 557–600.

Baker, P. T. and F. Daniels, Jr. 1956. Relationship between skinfold thickness and body cooling for two hours at 15 degrees centigrade. *Journal of Applied Physiology* 8:409–416.

Baker, P. T. and R. W. Newman. 1957. The use of bone weight for human identification. *American Journal of Physical Anthropology* 15:601–618.

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Yalman, R. G., W. Bruegemann, P. T. Baker and S. M. Garn. 1959. Volumetric determination of calcium in presence of phosphate. *Analytical Chemistry* 31:1230–1233.

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Baker, P. T. and R. B. Mazess. 1963. Calcium: Unusual sources in the highland Peruvian diet. *Science* 142:1466–1467.

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Baker, P. T. and M. A. Little. 1965. Bone density changes with age, altitude, sex and race factors in Peruvians. *Human Biology* 37:122–136.

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Baker, P. T., E. R. Buskirk, J. Kollias and R. B. Mazess. 1967. Temperature regulation at high altitude: Quechua Indians and U.S. whites during total body cold exposure. *Human Biology* 39: 155–169.

Baker, P. T. 1969. Human adaptation to high altitude. *Science* 196:1149–1156.

Frisancho, A. R., M. T. Newman and P. T. Baker. 1970. Differences in stature and cortical thickness among highland Quechua Indian boys. *American Journal of Clinical Nutrition* 23:382–385.

Little, M. A., R. B. Thomas, R. B. Mazess and P. T. Baker. 1971. Population differences and development changes in extremity temperature responses to cold among Andean Indians. *Human Biology* 73:70–91.

Conway, D. L. and P. T. Baker. 1972. Skin reflectance of Quechua Indians: The effects of genetic admixture, sex and age. *American Journal of Physical Anthropology* 36:267–281.

Hoff, C., P. T. Baker, J. Haas, R. Spector and R. Garuto. 1974. Variaciones altitudinales en el crecimiento y desarrollo fisico del Quechua Peruano. *Instituto Boliviano de Biologia de la Altura (Bolivia)* 4:5–20.

Baker, P. T. 1975. Research Strategies in Population Biology and Environmental Stress. In: Giles E., Friedlaender J. S., editors. *The Measures of Man: Methodologies in Biological Anthropology*. Cambridge, MA: Peabody Museum Press, pp. 230–259.

Beall, C. M., P. T. Baker, T. S. Baker and J. D. Haas. 1977. The effects of high altitude on adolescent growth in South American Peruvian Amerindians. *Human Biology* 49: 109–124.

Dutt, J. S. and P. T. Baker. 1978. Environment, migration and health in southern Peru. *Social Science and Medicine* 12:29–38.

Hanna, J. M. and P. T. Baker. 1979. Biocultural correlates to the blood pressure of Samoan migrants in Hawaii. *Human Biology* 51:481–497.

Baker, P. T. 1979. The use of human ecological models in biological anthropology: Examples from the Andes. *Collegium Antropologicum (Zagreb, Yugoslavia)* 3: 157–171.

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Greksa, L. P. and P. T. Baker. 1982. Aerobic capacity of modernizing Samoan men. *Human Biology* 54:777–788.

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Thomas, R. B., S. C. McRae and P. T. Baker. 1982. The use of models in anticipating effects of change on human populations. In *Energy and Effort. Symposia for the Society for the Study of Human Biology*, vol. 22. Ed. G. A. Harrison. London, England: Taylor and Francis, Ltd., pp. 243–281.

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tes, blood pressure and lifestyle among young Western Samoan men. *Human Biology* 57:635–647.

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Baker, P. T. and R. M. Garruto. 1992. Health Transition: Examples from the Western Pacific. *Human Biology* 64:785–789.

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Ralph M. Garruto

Graduate Program in Biomedical Anthropology, Laboratory of Biomedical Anthropology and Neurosciences, Binghamton University, Binghamton, New York, USA